**WHAT IS CLAIMED IS:**

1. A method of assessing contours in images of human heart tissue, comprising:

providing one or more images of the heart tissue to a computer system;

determining a portion of a contour of one of the images of human heart tissue using a first method performed by the computer system;

determining the portion of the contour of one of the images of human heart tissue using a second method performed by the computer system;

using the computer system to compare a first result of the first method to a second result of the second method.

2. A method of assessing contours in images of human heart tissue, comprising:

providing a plurality of images of the heart tissue to a computer system;

determining a portion of a contour of one of the images of human heart tissue using a first method;

determining the portion of the contour of one of the images of human heart tissue using a second method;

comparing a first result of the first method to a second result of the second method.

3. The method of claim 2, wherein comparing the first result to the second result comprises calculating at least two histograms of the densities of at least a portion of the first result and at least a portion of the second result.

4. The method of claim 2, wherein the first result comprises the portion of the contour determined using the first method.

5. The method of claim 2, wherein the second result comprises the portion of the contour determined using the second method.

6. The method of claim 2, wherein comparing the first result to the second result comprises calculating at least two histograms of the densities of at least a portion of the first result and at least a portion of the second result, and wherein at least two of the histograms are normalized.

7. The method of claim 2, further comprising assessing an optimal result based at least in part on the comparison of the first result and the second result.

8. The method of claim 2, further comprising:

assessing an optimal result based at least in part on the comparison of the first result and the second result; and

creating at least one second image using the computer system and the optimal result, wherein at least a portion of the second image appears at least three-dimensional.

9. The method of claim 2, further comprising using the determined portion of the contour to assess an area of at least a portion of the human heart.

10. The method of claim 2, further comprising using the determined portion of the contour to assess a volume of at least a portion of the human heart.

11. The method of claim 2, further comprising assessing a shape of the heart tissue by using the computer system to assess a curvature of at least a part of the determined portion of the contour.

12. The method of claim 2, further comprising creating at least one second image using the computer system, wherein at least a portion of the second image appears at least three-dimensional.

13. The method of claim 2, further comprising using the determined contour to assess an area of at least a portion of one of the images.

14. The method of claim 2, further comprising using the determined contour to assess a volume of at least a portion of the human heart.

15. The method of claim 2, further comprising:

providing a plurality of images of the heart tissue to a computer system, wherein a heart is in a substantially expanded condition; and

assessing an end diastolic volume of the heart by using the computer system to assess areas on the images.

16. The method of claim 2, further comprising:

providing a plurality of images of the heart tissue to a computer system, wherein a heart is in a substantially contracted condition; and

assessing an end systolic volume of the heart by using the computer system to assess areas on the images.

17. The method of claim 2, further comprising:

providing a plurality of images of the heart tissue to a computer system;

assessing a first volume and a second volume of the heart by using the computer system to assess areas on the images; and

using the first volume and the second volume to assess an ejection fraction of a human heart.

18. The method of claim 2, further comprising:

providing at least two images of the heart tissue, a velocity of fluid through a portion of a human heart, and a time frame over which the images were collected to a computer system; and

assessing fluid flow through a portion of an aorta by using the computer system to assess areas on the images.

19. The method of claim 2, further comprising:

providing at least two images of the heart tissue and a velocity as a function of time of blood through a portion of an aorta to a computer system; and

assessing a mitral regurgitation of a heart by using the computer system to assess at least a first and second volume of a portion of the heart and blood flow through a portion of the heart.

20. The method of claim 2, further comprising:

providing at least two images of the heart tissue to a computer system, wherein at least one image comprises an enhanced portion; and

enhancing at least a portion of at least one image by combining at least a portion of at least one of the images with at least the enhanced portion of a second image.

21. The method of claim 2, further comprising locating a left ventricle.

22. The method of claim 2, further comprising locating a left ventricle using the computer system.

23. The method of claim 2, further comprising locating a left ventricle in at least one of the images of the heart tissue using the computer system comprising comparing at least a portion of the image to a database comprising a plurality of templates.

24. The method of claim 2, wherein one or more of the images are two-dimensional.

25. The method of claim 2, wherein determining at least a portion of a contour using the first method comprises using the computer system to perform the determination.

26. The method of claim 2, wherein determining at least a portion of a contour using the second method comprises using the computer system to perform the determination.

27. The method of claim 2, wherein comparing the first and the second result comprises using the computer system to perform the comparison.

28. The method of claim 2, wherein the first method is fully automated.

29. The method of claim 2, wherein the first and the second methods are fully automated.

30. The method of claim 2, wherein the first method is at least boundary based.

31. The method of claim 2, wherein the first method comprises a boundary based method, wherein the boundary based method comprises:

dividing at least one image into a plurality of sections; and

assigning a value to at least one of the sections, wherein the value is a function of a feature of the section, wherein assigning the value comprises comparing the feature of the section to the feature of one or more adjacent sections.

32. The method of claim 2, wherein the first method comprises a density based method.

33. The method of claim 2, wherein the first method comprises a density based method, wherein the density based method comprises:

dividing at least one image into a plurality of sections; and

assigning a value to at least one of the sections, wherein the value is a function of an independent feature of the section.

34. The method of claim 2, wherein the first method is at least boundary based, and wherein the first method comprises a Hugh transform.

35. The method of claim 2, wherein the first method is at least boundary based, and wherein the first method comprises an active contours methodology.

36. The method of claim 2, wherein the first method is at least density based, and wherein the first method comprises a correlation methodology.

37. The method of claim 2, wherein the first method is at least density based, and wherein the first method comprises a fuzzy region growing methodology.

38. The method of claim 2, wherein the first method is at least density based, and wherein the first method comprises a fuzzy region growing methodology, wherein the fuzzy region growing methodology comprises lowering a density threshold and extending an area of one of the images until a large change in the area extended occurs.

39. The method of claim 2, wherein the first method comprises a boundary based method and the second method comprises a density based method.

40. The method of claim 2, wherein comparing the first result to the second result comprises calculating at least two histograms of the densities of at least a portion of the first result and at least a portion of the second result, and wherein at least two of the histograms are normalized.

41. A carrier medium configured to store program instructions, wherein the program instructions are executable to implement a method, comprising:

providing one or more images of the heart tissue to a computer system;

determining at least a portion of a contour of one of the images of human heart tissue using a first method;

determining the portion of the contour of one of the images of human heart tissue using a second method; and

comparing a first result of the first method to a second result of the second method.

42. The carrier medium of claim 41, wherein the program instructions are executable to implement a method, further comprising creating at least one second image using the

computer system, wherein at least a portion of the second image appears at least three-dimensional.

43. The carrier medium of claim 41, wherein the program instructions are executable to implement a method, further comprising assessing an optimal result based at least in part on the comparison of the first result and the second result.

44. The carrier medium of claim 41, wherein the program instructions are executable to implement a method, further comprising:

assessing an optimal result based at least in part on the comparison of the first result and the second result; and

creating at least one second image using the computer system and the optimal result, wherein at least a portion of the second image appears at least three-dimensional.

45. The carrier medium of claim 41, wherein the program instructions are executable to implement a method, further comprising using the determined contour to assess an area of at least a portion of one of the images.

46. The carrier medium of claim 41, wherein the program instructions are executable to implement a method, further comprising using the determined contour to assess a volume of at least a portion of the human heart.

47. The carrier medium of claim 41, wherein the program instructions are executable to implement a method, further comprising:

providing a plurality of images of the heart tissue to a computer system, wherein a heart is in a substantially expanded condition; and

assessing an end diastolic volume of the heart by using the computer system to assess areas on the images.

48. The carrier medium of claim 41, wherein the program instructions are executable to implement a method, further comprising:

providing a plurality of images of the heart tissue to a computer system, wherein a heart is in a substantially contracted condition; and

assessing an end systolic volume of the heart by using the computer system to assess areas on the images.

49. The carrier medium of claim 41, wherein the program instructions are executable to implement a method, further comprising:

providing a plurality of images of the heart tissue to a computer system;

assessing a first volume and a second volume of the heart by using the computer system to assess areas on the images; and

using the first volume and the second volume to assess an ejection fraction of a human heart.

50. The carrier medium of claim 41, wherein the program instructions are executable to implement a method, further comprising assessing a shape of the heart tissue by using the computer system to assess a curvature of at least a portion of the determined contour.

51. The carrier medium of claim 41, wherein the program instructions are executable to implement a method, further comprising:

providing at least two images of the heart tissue, a velocity of fluid through a portion of a human heart, and a time frame over which the images were collected to a computer system; and

assessing fluid flow through a portion of an aorta by using the computer system to assess areas on the images.

52. The carrier medium of claim 41, wherein the program instructions are executable to implement a method, further comprising:

providing at least two images of the heart tissue and a velocity as a function of time of blood through a portion of an aorta to a computer system; and

assessing a mitral regurgitation of a heart by using the computer system to assess at least a first and second volume of a portion of the heart and blood flow through a portion of the heart.

53. The carrier medium of claim 41, wherein the program instructions are executable to implement a method, further comprising:

providing at least two images of the heart tissue to a computer system, wherein at least one image comprises an enhanced portion; and

enhancing at least a portion of at least one image by combining at least a portion of at least one of the images with at least the enhanced portion of a second image.

54. The carrier medium of claim 41, wherein the program instructions are executable to implement a method, further comprising locating a left ventricle.

55. The carrier medium of claim 41, wherein the program instructions are executable to implement a method, further comprising locating a left ventricle using the computer system.

56. The carrier medium of claim 41, wherein the program instructions are executable to implement a method, further comprising locating a left ventricle in at least one of the images of the heart tissue using the computer system comprising comparing at least a portion of the image to a database comprising a plurality of templates.

57. The carrier medium of claim 41, wherein one or more of the images are two-dimensional.

58. The carrier medium of claim 41, wherein determining at least a portion of a contour using the first method comprises using the computer system to perform the determination.

59. The carrier medium of claim 41, wherein determining at least a portion of a contour using the second method comprises using the computer system to perform the determination.

60. The carrier medium of claim 41, wherein comparing the first and the second result comprises using the computer system to perform the comparison.

61. The carrier medium of claim 41, wherein the first method is fully automated.

62. The carrier medium of claim 41, wherein the first and the second methods are fully automated.

63. The carrier medium of claim 41, wherein the first method is at least boundary based.

64. The carrier medium of claim 41, wherein the first method comprises a boundary based method, wherein the boundary based method comprises:

dividing at least one image into a plurality of sections; and

assigning a value to at least one of the sections, wherein the value is a function of a feature of the section, wherein assigning the value comprises comparing the feature of the section to the feature of one or more adjacent sections.

65. The carrier medium of claim 41, wherein the first method comprises a density based method.

66. The carrier medium of claim 41, wherein the first method comprises a density based method, wherein the density based method comprises:

dividing at least one image into a plurality of sections; and

assigning a value to at least one of the sections, wherein the value is a function of an independent feature of the section.

67. The carrier medium of claim 41, wherein the first method is at least boundary based, and wherein the first method comprises a Hugh transform.

68. The carrier medium of claim 41, wherein the first method is at least boundary based, and wherein the first method comprises an active contours methodology.

69. The carrier medium of claim 41, wherein the first method is at least density based, and wherein the first method comprises a correlation methodology.

70. The carrier medium of claim 41, wherein the first method is at least density based, and wherein the first method comprises a fuzzy region growing methodology.

71. The carrier medium of claim 41, wherein the first method is at least density based, and wherein the first method comprises a fuzzy region growing methodology, wherein the fuzzy region growing methodology comprises lowering a density threshold and extending an area of one of the images until a large change in the area extended occurs.

72. The carrier medium of claim 41, wherein the first method comprises a boundary based method and the second method comprises a density based method.

73. The carrier medium of claim 41, wherein comparing the first result to the second result comprises calculating at least two histograms of the densities of at least a portion of the first result and at least a portion of the second result.

74. The carrier medium of claim 41, wherein comparing the first result to the second result comprises calculating at least two histograms of the densities of at least a portion of the first result and at least a portion of the second result, and wherein at least two of the histograms are normalized.

75. The carrier medium of claim 41, wherein comparing the first result to the second result comprises calculating at least two histograms of the densities of at least a portion of the first result and at least a portion of the second result, and wherein at least two of the histograms are normalized.

76. A system configured to facilitate diagnosis of a human heart, comprising:

a CPU; and

a system memory coupled to the CPU, wherein the system memory stores one or more computer programs executable by the CPU;

wherein at least one computer program is executable to:

determine at least a portion of a contour of one of the images of human heart tissue using a first method;

determine the portion of the contour of one of the images of human heart tissue using a second method; and

compare a first result of the first method to a second result of the second method.

77. A method of assessing contours in images of human heart tissue, comprising:

providing one or more images of the heart tissue to a computer system, wherein the one or more of the images of human heart tissue comprise at least a portion of at least two features of the human heart;

determining at least a portion of a first contour of a first feature from one of the images of human heart tissue using a first method;

determining at least a portion of a second contour of a second feature from one of the images of human heart tissue using a second method; and

comparing a part of the first contour to a part of the second contour to assess the determined contours.

78. The method of claim 77, wherein the first method and the second method are similar.

79. The method of claim 77, further comprising assessing an accuracy of the determined contours.

80. The method of claim 77, further comprising:

assigning values to one or more sections in each of the first and second contours, wherein each value is a function of a feature of each section; and

comparing a first number of sections in the first contour to a second number of sections in the second contour with similar assigned values to assess an accuracy of the determined contours.

81. The method of claim 77, wherein the first feature comprises the left ventricle.

82. The method of claim 77, wherein the second feature comprises the left ventricular wall.

83. The method of claim 77, further comprising locating the left ventricle in at least one of the images of the heart tissue using the computer system by comparing at least a portion of the image to a database comprising a plurality of templates.

84. The method of claim 77, wherein one or more of the images are two-dimensional.

85. The method of claim 77, wherein determining at least a portion of the first contour using the first method comprises using the computer system to perform the determination.

86. The method of claim 77, wherein determining at least a portion of the second contour using the second method comprises using the computer system to perform the determination.

87. The method of claim 77, wherein comparing the part of the first contour and the part of the second contour comprises using the computer system to perform the comparison.

88. The method of claim 77, wherein the first method is fully automated.

89. The method of claim 77, wherein the first and the second methods are fully automated.

90. The method of claim 77, wherein the first method comprises a boundary based method.

91. The method of claim 77, wherein the first method comprises a boundary based method, the boundary based method comprising:

dividing at least one image into a plurality of sections; and

assigning a value to at least one of the sections, wherein the value is a function of a feature of the section, and wherein assigning the value comprises comparing the feature of the section to the feature of one or more adjacent sections.

92. The method of claim 77, wherein the first method comprises a density based method.

93. The method of claim 77, wherein the first method comprises a density based method, the density based method comprising:

dividing at least one image into a plurality of sections; and

assigning a value to at least one of the sections, wherein the value is a function of an independent feature of the section.

94. The method of claim 77, wherein the first method is at least boundary based, and wherein the first method comprises a Hugh transform.

95. The method of claim 77, wherein the first method is at least boundary based, and wherein the first method comprises an active contours methodology.

96. The method of claim 77, wherein the first method is at least density based, and wherein the first method comprises a correlation methodology.

97. The method of claim 77, wherein the first method is at least density based, and wherein the first method comprises a fuzzy region growing methodology.

98. The method of claim 77, wherein the first method is at least density based, and wherein the first method comprises a fuzzy region growing methodology, the fuzzy region growing methodology comprising lowering a density threshold and extending an area of one of the images until a large change in the area extended occurs.

99. The method of claim 77, wherein the first method comprises a boundary based method and the second method comprises a density based method.

100. The method of claim 77, wherein comparing the part of the first contour to the part of the second contour comprises calculating at least two histograms of the densities of the part of the first contour and the part of the second contour.

101. The method of claim 77, wherein comparing the part of the first contour to the part of the second contour comprises calculating at least two histograms of the densities of the first contour and the part of the second contour, and wherein at least two of the histograms are normalized.

102. The method of claim 77, further comprising creating at least one second image using the computer system, wherein at least a portion of the second image appears at least three-dimensional.

103. The method of claim 77, further comprising using at least the part of the first contour to assess an area of at least a portion of the human heart.

104. The method of claim 77, further comprising using at least the part of the first contour to assess a volume of at least a portion of the human heart.

105. The method of claim 77, further comprising:

providing a plurality of images of the heart tissue to a computer system, wherein a heart is in a substantially expanded condition; and

assessing an end diastolic volume of the heart by using the computer system to assess areas on the images.

106. The method of claim 77, further comprising:

providing a plurality of images of the heart tissue to a computer system, wherein a heart is in a substantially contracted condition; and

assessing an end systolic volume of the heart by using the computer system to assess areas on the images.

107. The method of claim 77, further comprising:

providing a plurality of images of the heart tissue to a computer system;

assessing a first volume and a second volume of the heart by using the computer system to assess areas on the images; and

using the first volume and the second volume to assess an ejection fraction of a human heart.

108. The method of claim 77, further comprising assessing a shape of the heart tissue by using the computer system to assess a curvature of at least the portion of the first contour.

109. The method of claim 77, further comprising:

providing at least two images of the heart tissue, a velocity of fluid through a portion of a human heart, and a time frame over which the images were collected to a computer system; and

assessing fluid flow through a portion of an aorta by using the computer system to assess areas on the images.

110. The method of claim 77, further comprising:

providing at least two images of the heart tissue and a velocity as a function of time of blood through a portion of an aorta to a computer system; and

assessing a mitral regurgitation of a heart by using the computer system to assess at least a first and second volume of a portion of the heart and blood flow through a portion of the heart.

111. The method of claim 77, further comprising:

providing at least two images of the heart tissue to a computer system, wherein at least one image comprises an enhanced portion; and

enhancing at least a portion of at least one image by combining at least a portion of at least one of the images with at least the enhanced portion of a second image.

112. A carrier medium configured to store program instructions, wherein the program instructions are executable to implement a method, comprising:

providing one or more images of the heart tissue to a computer system, wherein the one or more of the images of human heart tissue comprise at least a portion of at least two features of the human heart;

determining at least a portion of a first contour of a first feature from one of the images of human heart tissue using a first method;

determining at least a portion of a second contour of a second feature from one of the images of human heart tissue using a second method; and

comparing a part of the first contour to a part of the second contour to assess the determined contours.

113. A system configured to facilitate diagnosis of a human heart, comprising:

a CPU; and

a system memory coupled to the CPU, wherein the system memory stores one or more computer programs executable by the CPU;

wherein at least one computer program is executable to:

provide one or more images of the heart tissue to a computer system, wherein the one or more of the images of human heart tissue comprise at least a portion of at least two features of the human heart;

determine at least a portion of a first contour of a first feature from one of the images of human heart tissue using a first method;

determine at least a portion of a second contour of a second feature from one of the images of human heart tissue using a second method; and

compare a part of the first contour to a part of the second contour to assess the determined contours.

114. A method of assessing contours in images of human heart tissue, comprising:

providing one or more images of the heart tissue to a computer system, wherein the one or more images of human heart tissue comprise portions of at least two features of the human heart, and wherein the portions are substantially adjacent each other;

determining a first contour of a first feature from one of the images of human heart tissue using a first method;

determining a second contour of a second feature from one of the images of human heart tissue using a second method; and

comparing a part of the determined first contour to a part of the determined second contour to assess an accuracy of the determined contours.

115. A method of assessing contours in images of human heart tissue, comprising:

providing one or more images of the heart tissue to a computer system, wherein one or more of the images of human heart tissue comprise at least a portion of at least two features of the human heart, and wherein portions of at least two of the features are substantially adjacent each other;

determining a first contour of a first feature from one of the images of human heart tissue using a first method;

determining a second contour of a second feature from one of the images of human heart tissue using a second method; and

assigning values to one or more sections in each of the first and second contours, wherein each value is a function of a feature of each section; and

comparing a first number of sections in the first contour to a second number of sections in the second contour with similar assigned values to assess an accuracy of the determined contours.

116. A method of assessing contours in images of human heart tissue, comprising:

providing a plurality of images of at least a portion of a human body to a computer system, wherein at least two of the images comprise data from similar regions of the body taken at different times;

assessing motion in the at least two images to determine a region of interest using a first method performed by the computer system, wherein the region of interest comprises at least some heart tissue;

assessing an optimal center of the region of interest; and

constraining a second method using the optimal center, wherein the second method is performed by the computer system to assess a portion of a contour of one of the images of human heart tissue.

117. The method of claim 116, wherein the second method comprises an active appearance model.

118. The method of claim 116, wherein the second method comprises a template.

119. The method of claim 118, wherein the template comprises a human heart.

120. The method of claim 118, wherein the template comprises a left ventricle of a human heart.

121. The method of claim 116, further comprising identifying a left ventricle of the heart using the optimal center.

122. The method of claim 116 further comprising:

assessing a first center of the region of interest along a first axis;

assessing one or more possible second centers of the region of interest along a second axis; and

approximating the optimal center of the region of interest by comparing the first center of the region of interest and the one or more second centers of the region of interest.

123. The method of claim 122, further comprising assessing at least one of the possible second centers of the region of interest along the second axis using a boundary based method, wherein the second axis comprises a short axis.

124. The method of claim 123, further comprising integrating, over time, one or more results of the boundary based method applied to one or more sections of the region of interest.

125. The method of claim 124, further comprising integrating one or more results of the time integration.

126. The method of claim 125, further comprising refining the optimal third center using the first center for each of the one or more sections.

127. The method of claim 122, further comprising assessing at least one of the possible second centers of the region of interest along the second axis using a Hough transform, wherein the second axis comprises a short axis.

128. The method of claim 116, wherein the plurality of images comprises data gathered over at least about one complete cardiac cycle.

129. The method of claim 116, wherein the plurality of images comprise data gathered over at least about 800 milliseconds.

130. The method of claim 122, wherein the first axis comprises a long axis.

131. The method of claim 116, further comprising:

dividing at least some of the provided images into a plurality of sections; and

calculating an average intensity for each section.

132. The method of claim 116, further comprising:

dividing at least some of the provided images into a plurality of sections;

calculating an average intensity for each section; and

creating a multi-dimensional image using the averaged intensities of each section of the image.

133. The method of claim 116, further comprising:

dividing at least some of the provided images into a plurality of sections;

calculating an average intensity for each section; and

calculating a variance of the intensity of each section from the average intensity.

134. The method of claim 116, further comprising:

dividing at least some of the provided images into a plurality of sections;

calculating an average intensity for each section;

calculating a variance of the intensity of each section from the average intensity; and

creating a multi-dimensional image using the variance of each section of the image.

135. The method of claim 116, further comprising:

dividing at least some of the provided images into a plurality of sections;

calculating an average intensity for each section;

calculating a variance of the intensity of each section from the average intensity; and

integrating at least some of the calculated variances.

136. The method of claim 116, further comprising:

dividing at least some of the provided images into a plurality of sections;

calculating an average intensity for each section;

calculating a variance of the intensity of each section from the average intensity;

integrating at least some of the calculated variances; and

creating a multi-dimensional image using the integrated variances of the image.

137. The method of claim 116, further comprising:

dividing at least some of the provided images into a plurality of sections;

calculating an average intensity for each section;

calculating a variance of the intensity of each section from the average intensity;

creating a multi-dimensional image using the integrated variances of the image; and

using a predetermined shape to assess a location of one or more substantially adjacent sections comprising a greatest average variance within the created multi-dimensional image.

138. The method of claim 116, further comprising:

dividing at least some of the provided images into a plurality of sections;

calculating an average intensity for each section;

calculating a variance of the intensity of each section from the average intensity;

creating a multi-dimensional image using the integrated variances of the image; and

using a predetermined shape to assess a location of one or more substantially adjacent sections comprising a greatest average variance within the created multi-dimensional image, wherein the predetermined shape comprises a rectangle of a predetermined size at least greater than an average human heart.

139. The method of claim 116, further comprising assessing a midpoint in an intersection between a short axis and a long axis within the region of interest.

140. The method of claim 139, further comprising assessing a long axis within the region of interest by:

assessing a position of a first point substantially within the middle of a mitral valve; and

assessing a position of a second point substantially adjacent an apex of a left ventricle of the heart.

141. The method of claim 140, further comprising forming a shape using the first and second points as vertices to assist in approximating the optimal center.

142. The method of claim 140, further comprising assessing the position of the first point by intersecting an image of a two chamber view of the heart with an image of a four chamber view of the heart and an image of a short axis view of the heart.

143. The method of claim 142, wherein the image of the short axis view of the heart comprises a substantially first image of the short axis view of heart within the plurality of provided images.

144. The method of claim 140, further comprising assessing the position of the second point by intersecting an image of a two chamber view of the heart with an image of a four chamber view of the heart and an image of a short axis view of the heart.

145. The method of claim 144, wherein the image of the short axis view of the heart comprises a substantially final image of the short axis view of the heart within the plurality of provided images.

146. The method of claim 139, further comprising assessing a short axis within the region of interest comprising:

assessing a position of a first point by intersecting an image of a two chamber view of the heart with an image of a four chamber view of the heart and a substantially first image of a short axis view of the heart within the plurality of provided images; and

assessing a position of a second point by intersecting an image of a two chamber view of the heart with an image of a four chamber view of the heart and a substantially final image of a short axis view of the heart within the plurality of provided images.

147. The method of claim 146, further comprising forming a shape using the first and second points as vertices to assist in approximating optimal center.

148. The method of claim 116, wherein the assessed motion comprises motion contributed to movement of the heart.

149. The method of claim 116, wherein the first method is fully automated.

150. The method of claim 116, wherein the second method is fully automated.

151. The method of claim 116, wherein the first and the second methods are fully automated.

152. The method of claim 116, wherein the second method comprises using a boundary based method comprising:

dividing at least one image into a plurality of sections; and

assigning a value to at least one of the sections, wherein the value is a function of a feature of the section, wherein assigning the value comprises comparing the feature of the section to the feature of one or more adjacent sections.

153. The method of claim 116, further comprising creating at least one second image using the computer system, wherein at least a portion of the second image appears at least three-dimensional.

154. The method of claim 116, further comprising using the assessed contour to assess an area of at least a portion of the human heart.

155. The method of claim 116, further comprising using the assessed contour to assess a volume of at least a portion of the human heart.

156. The method of claim 116, further comprising:

providing a plurality of images of the heart tissue to a computer system, wherein a heart is in a substantially expanded condition; and

assessing an end diastolic volume of the heart by using the computer system to assess areas on the images.

157. The method of claim 116, further comprising:

providing a plurality of images of the heart tissue to a computer system, wherein a heart is in a substantially contracted condition; and

assessing an end systolic volume of the heart by using the computer system to assess areas on the images.

158. The method of claim 116, further comprising:

providing a plurality of images of the heart tissue to a computer system;

assessing a first volume and a second volume of the heart by using the computer system to assess areas on the images; and

using the first volume and the second volume to assess an ejection fraction of a human heart.

159. The method of claim 116, further comprising assessing a shape of the heart tissue by using the computer system to assess a curvature of at least a portion of the assessed contour.

160. The method of claim 116, further comprising:

providing at least two images of the heart tissue, a velocity of fluid through a portion of a human heart, and a time frame over which the images were collected to a computer system; and

assessing fluid flow through a portion of an aorta by using the computer system to assess areas on the images.

161. The method of claim 116, further comprising:

providing at least two images of the heart tissue and a velocity as a function of time of blood through a portion of an aorta to a computer system; and

assessing a mitral regurgitation of a heart by using the computer system to assess at least a first and second volume of a portion of the heart and blood flow through a portion of the heart.

162. The method of claim 116, further comprising:

providing at least two images of the heart tissue to a computer system, wherein at least one image comprises an enhanced portion; and

enhancing at least a portion of at least one image by combining at least a portion of at least one of the images with at least the enhanced portion of a second image.

163. The method of claim 116, further comprising:

identifying a position of a left ventricle of the heart using the optimal center;

identifying a position of a right ventricle of the heart based upon a position of the identified left ventricle; and

assessing a position of a septum wall substantially positioned between the left and right ventricles using the identified positions of the left and right ventricles.

164. The method of claim 116, further comprising:

assessing a first length of a perimeter of at least a portion of the human heart and a second length of at least a portion of scar tissue using the assessed contour; and

assessing a state of the heart tissue using the assessed first and second length.

165. The method of claim 164, further comprising dividing the second length by the first length.

166. The method of claim 116, further comprising:

assessing a position of a left ventricle of the heart using the optimal center;

assessing a position of non-viable heart tissue in the left ventricle;

excluding at least a portion of the non-viable tissue using the computer to form a contractile left ventricle;

assessing an end systolic volume and an end diastolic volume of the contractile left ventricle by using the computer system to assess areas on the images; and

assessing a contractile ejection fraction from the end systolic volume and the end diastolic volume.

167. The method of claim 116, further comprising:

assessing a length of at least one chordae tether using the assessed contour to assess at least one distance between at least one papillary muscle and a mitral valve.

168. The method of claim 116, further comprising:

assessing a position of a left ventricle of the heart using the optimal center;

assessing an end systolic volume and an end diastolic volume of the left ventricle by using the computer system to assess areas on the images; and

assessing a diskinetic aneurysm based on the end systolic volume and the end diastolic volume.

169. The method of claim 116, further comprising:

identifying a position of a left ventricle of the heart using the optimal center;

identifying a position of a right ventricle of the heart based upon a position of the identified left ventricle;

assessing an end systolic volume of the left and right ventricles over a complete cardiac cycle by using the computer system to assess areas on the images; and

assessing a difference in time of an occurrence of the end systolic volumes of the left and right ventricles.

170. The method of claim 116, further comprising:

providing two or more images of the heart tissue, wherein at least a portion of two or more of the images are enhanced;

assessing a position of a left ventricle of the heart using the optimal center; and

assessing an end systolic volume and an end diastolic volume of the left ventricle by using the computer system to assess areas on the images to assess a state of the heart tissue.

171. The method of claim 170, further comprising assessing relative strain placed on heart tissue by comparing areas on the images of the end systolic volume and an end diastolic volume.

172. The method of claim 116, further comprising:

assessing a position of a left ventricle of the heart using the optimal center;

assessing a volume and an inner surface area of the left ventricle by using the computer system to assess areas on the images; and

determining an effective height of the heart by dividing the volume by the inner surface area to assess a state of a dilation of the heart.

173. The method of claim 116, further comprising:

identifying a position of a left ventricle of the heart using the optimal center;

assessing a first thickness of a left ventricle wall in a diastolic state and a second thickness of a left ventricle wall in a systolic state within a complete cardiac cycle by using the computer system to assess areas on the images; and

extrapolating data by assessing a relationship between the assessed first and second thicknesses and time.

174. The method of claim 116, further comprising:

identifying a position of at least a left ventricle of the heart using the optimal center;

assessing a boundary of at least the left ventricle over at least one complete cardiac cycle using the assessed contour; and

determining an order of contraction of portions of the assessed boundary using the assessed boundary over the cardiac cycle.

175. The method of claim 116, further comprising:

providing a first plurality of images of the heart tissue to the computer system, wherein the first plurality of images comprises a two chamber view of the heart along a long axis;

providing at least a second plurality of images of the heart tissue to the computer system, wherein the second plurality of images comprises a four chamber view of the heart along a long axis;

using the computer system to assess at least two positions along a perimeter of a mitral valve from each of the first plurality of images and the second plurality of images; and

assessing a mitral valve orifice area using the at least four assessed positions.

176. The method of claim 116, further comprising:

providing a first plurality of images of the heart tissue to the computer system, wherein the first plurality of images is procured within a first cardiac cycle, and wherein the first cardiac cycle occurs before a cardiac intervention;

providing a second plurality of images of the heart tissue to the computer system, wherein the second plurality of images is procured within a second cardiac cycle, and wherein the second cardiac cycle occurs after a cardiac intervention; and

assessing a state of the heart tissue by comparing the first plurality of images to the second plurality of images using the computer system.

177. The method of claim 116, further comprising:

identifying a position of a left ventricle of the heart using the optimal center;

assessing an end systolic volume and an end diastolic volume of the left ventricle over a complete cardiac cycle by using the computer system to assess areas on the images; and

assessing a relationship between the assessed volumes and times during the cardiac cycle.

178. The method of claim 177, further comprising assessing a fluid ejection rate of the left ventricle to assess a state of the heart.

179. The method of claim 177, further comprising assessing a fluid filling rate of the left ventricle to assess a state of the heart.

180. The method of claim 116, further comprising:

providing a first plurality of images of the heart tissue to the computer system, wherein the first plurality of images is procured within a first cardiac cycle along a first axis;

providing at least a second plurality of images of the heart tissue to the computer system, wherein the second plurality of images is procured within a second cardiac cycle along a second axis; and

minimizing a cumulative distance between one or more first sections within the second plurality of images and one or more second sections, wherein the first section and the second section comprise a similar position within the heart tissue.

181. The method of claim 180, wherein the first axis comprises a long axis within the heart.

182. The method of claim 180, wherein the first axis comprises a short axis within the heart.

183. The method of claim 180, wherein the first plurality of images comprises a four chamber view of the heart.

184. The method of claim 180, wherein the first plurality of images comprises a two chamber view of the heart.

185. The method of claim 116, further comprising:

providing a first plurality of images of the heart tissue to the computer system, wherein the first plurality of images is procured within a first cardiac cycle;

providing a second plurality of images of the heart tissue to the computer system, wherein the second plurality of images is procured within a second cardiac cycle, and wherein the second cardiac cycle occurs when the heart tissue is under stress relative to the first cardiac cycle; and

assessing a state of the heart tissue by comparing the first plurality of images to the second plurality of images using the computer system.

186. The method of claim 185, further comprising stressing the heart in the second cardiac cycle by physical exertion beyond an average level for the heart tissue.

187. The method of claim 185, further comprising artificially inducing stress in the heart in the second cardiac cycle.

188. The method of claim 116, further comprising:

providing a first plurality of images of the heart tissue to the computer system, wherein the first plurality of images is procured with a first method;

providing a second plurality of images of the heart tissue to the computer system, wherein the second plurality of images is procured with a second method, and wherein the second plurality of images comprises at least some portions of heart tissue different from the heart tissue within the first plurality of images; and

assessing a state of the heart tissue by combining parts of the first plurality of images and the second plurality of images using the computer system.

189. The method of claim 188, wherein the first method comprises MRI.

190. The method of claim 188, wherein the first method comprises MRA.

191. The method of claim 188, wherein the first method comprises MRI, and wherein the second method comprises MRA.

192. The method of claim 116, further comprising:

assessing one or more features of the heart using the assessed contour; and

comparing one or more of the features to one or more predetermined parameters in a database to assess a candidacy of the heart for a cardiac intervention.

193. The method of claim 192, wherein the cardiac intervention comprises a revascularization procedure.

194. The method of claim 192, wherein the cardiac intervention comprises a ventricular reconstruction procedure.

195. The method of claim 192, wherein the cardiac intervention comprises a mitral valve repair procedure.

196. The method of claim 192, wherein the cardiac intervention comprises a defibrillator therapy procedure.

197. The method of claim 192, wherein the cardiac intervention comprises a biventricular pacing procedure.

198. The method of claim 192, wherein the cardiac intervention comprises a drug treatment procedure.

199. The method of claim 192, wherein the feature comprises a percentage of akinetic tissue.

200. The method of claim 192, wherein the feature comprises a percentage of non-viable tissue.

201. The method of claim 192, wherein the feature comprises an ejection fraction.

202. The method of claim 192, wherein the feature comprises a relative distance of at least one papillary muscle.

203. The method of claim 192, wherein the feature comprises a relative angle of at least one papillary muscle.

204. The method of claim 192, wherein the feature comprises a mitral regurgitation.

205. The method of claim 192, wherein the feature comprises a QRS.

206. The method of claim 192, wherein the feature comprises an end diastolic volume.

207. The method of claim 192, wherein the feature comprises a ventricular contraction.

208. The method of claim 192, wherein the feature comprises a peak ejection velocity.

209. The method of claim 116, further comprising assessing a cost to be charged to a user for using the method based on a number of times the user applies the method.

210. The method of claim 116, further comprising:

creating one or more multi-dimensional second images of the heart tissue using the assessed contour.

211. The method of claim 210, wherein at least one of the multi-dimensional second images comprises indicators representing non-viable tissue.

212. The method of claim 210, wherein at least one of the multi-dimensional second images comprises indicators representing akinetic tissue.

213. The method of claim 210, wherein at least one of the multi-dimensional second images comprises indicators representing ischemic tissue.

214. The method of claim 116, further comprising:

identifying a position of a left ventricle of the heart using the optimal center; and

creating one or more multi-dimensional second images of at least part of the left ventricle using the assessed contour and the computer system, wherein at least one of the multi-dimensional second images comprises indicators representing scar tissue data.

215. The method of claim 214, wherein the scar tissue data comprises a degree of transmurality.

216. The method of claim 214, wherein the scar tissue data comprises an endocardial surface area.

217. The method of claim 214, wherein the scar tissue data comprises an endocardial volume.

218. The method of claim 116, further comprising:

creating one or more multi-dimensional second images of at least part of the heart using the assessed contour and the computer system, wherein at least one of the multi-dimensional second images comprises indicators representing a thickness of at least a part of a heart wall.

219. A carrier medium configured to store program instructions, wherein the program instructions are executable to implement a method, comprising:

providing a plurality of images of at least a portion of a human body to a computer system, wherein at least two of the images comprise data from similar regions of the body taken at different times;

assessing motion in the at least two images to determine a region of interest using a first method performed by the computer system, wherein the region of interest comprises at least some heart tissue;

assessing an optimal center of the region of interest; and

constraining a second method using the optimal center, wherein the second method is performed by the computer system to assess a portion of a contour of one of the images of human heart tissue.

220. A system configured to facilitate diagnosis of a human heart, comprising:

a CPU; and

a system memory coupled to the CPU, wherein the system memory stores one or more computer programs executable by the CPU;

wherein at least one computer program is executable to:

provide a plurality of images of at least a portion of a human body to a computer system, wherein at least two of the images comprise data from similar regions of the body taken at different times;

assess motion in the at least two images to determine a region of interest using a first method performed by the computer system, wherein the region of interest comprises at least some heart tissue;

assess an optimal center of the region of interest; and

constrain a second method using the optimal center, wherein the second method is performed by the computer system to assess a portion of a contour of one of the images of human heart tissue.

221. A method of assessing contours in images of human heart tissue, comprising:

providing a plurality of images of at least a portion of a human body to a computer system, wherein at least two of the images comprise data from similar regions of the body taken at different times;

assessing motion in the at least two images to determine a region of interest using a first method performed by the computer system, wherein the region of interest comprises at least some heart tissue;

assessing a first center of the region of interest along a first axis;

assessing one or more possible second centers of the region of interest along a second axis;

approximating an optimal third center of the region of interest by comparing the first center of the region of interest and the one or more possible second centers of the region of interest; and

constraining a second method using the optimal third center, wherein the second method is performed by the computer system to assess a portion of a contour of one of the images of human heart tissue.

222. The method of claim 221, wherein the second method comprises an active appearance model.

223. The method of claim 221, wherein the second method comprises a template.

224. The method of claim 223, wherein the template comprises a human heart.

225. The method of claim 223, wherein the template comprises a left ventricle of a human heart.

226. The method of claim 221, further comprising identifying a left ventricle of the heart using the optimal third center.

227. The method of claim 221, further comprising assessing at least one of the possible second centers of the region of interest along the second axis using a boundary based method, wherein the second axis comprises a short axis.

228. The method of claim 227, further comprising integrating, over time, one or more results of the boundary based method applied to one or more sections of the region of interest.

229. The method of claim 228, further comprising integrating one or more results of the time integration.

230. The method of claim 229, further comprising refining the optimal third center using the first center for each of the one or more sections.

231. The method of claim 221, further comprising assessing at least one of the possible second centers of the region of interest along the second axis using a Hough transform, wherein the second axis comprises a short axis.

232. The method of claim 221, wherein the plurality of images comprises data gathered over at least about one complete cardiac cycle.

233. The method of claim 221, wherein the plurality of images comprise data gathered over at least about 800 milliseconds.

234. The method of claim 221, wherein the first axis comprises a long axis.

235. The method of claim 221, further comprising:

dividing at least some of the provided images into a plurality of sections; and

calculating an average intensity for each section.

236. The method of claim 221, further comprising:

dividing at least some of the provided images into a plurality of sections;

calculating an average intensity for each section; and

creating a multi-dimensional image using the averaged intensities of each section of the image.

237. The method of claim 221, further comprising:

dividing at least some of the provided images into a plurality of sections;

calculating an average intensity for each section; and

calculating a variance of the intensity of each section from the average intensity.

238. The method of claim 221, further comprising:

dividing at least some of the provided images into a plurality of sections;

calculating an average intensity for each section;

calculating a variance of the intensity of each section from the average intensity; and

creating a multi-dimensional image using the variance of each section of the image.

239. The method of claim 221, further comprising:

dividing at least some of the provided images into a plurality of sections;

calculating an average intensity for each section;

calculating a variance of the intensity of each section from the average intensity; and

integrating at least some of the calculated variances.

240. The method of claim 221, further comprising:

dividing at least some of the provided images into a plurality of sections;

calculating an average intensity for each section;

calculating a variance of the intensity of each section from the average intensity;

integrating at least some of the calculated variances; and

creating a multi-dimensional image using the integrated variances of the image.

241. The method of claim 221, further comprising:

dividing at least some of the provided images into a plurality of sections;

calculating an average intensity for each section;

calculating a variance of the intensity of each section from the average intensity;

creating a multi-dimensional image using the integrated variances of the image; and

using a predetermined shape to assess a location of one or more substantially adjacent sections comprising a greatest average variance within the created multi-dimensional image.

242. The method of claim 221, further comprising:

dividing at least some of the provided images into a plurality of sections;

calculating an average intensity for each section;

calculating a variance of the intensity of each section from the average intensity;

creating a multi-dimensional image using the integrated variances of the image; and

using a predetermined shape to assess a location of one or more substantially adjacent sections comprising a greatest average variance within the created multi-dimensional image, wherein the predetermined shape comprises a rectangle of a predetermined size at least greater than an average human heart.

243. The method of claim 221, further comprising assessing a midpoint in an intersection between a short axis and a long axis within the region of interest.

244. The method of claim 243, further comprising assessing a long axis within the region of interest by:

assessing a position of a first point substantially within the middle of a mitral valve; and

assessing a position of a second point substantially adjacent an apex of a left ventricle of the heart.

245. The method of claim 244, further comprising forming a shape using the first and second points as vertices to assist in approximating the optimal third center.

246. The method of claim 244, further comprising assessing the position of the first point by intersecting an image of a two chamber view of the heart with an image of a four chamber view of the heart and an image of a short axis view of the heart.

247. The method of claim 246, wherein the image of the short axis view of the heart comprises a substantially first image of the short axis view of heart within the plurality of provided images.

248. The method of claim 244, further comprising assessing the position of the second point by intersecting an image of a two chamber view of the heart with an image of a four chamber view of the heart and an image of a short axis view of the heart.

249. The method of claim 248, wherein the image of the short axis view of the heart comprises a substantially final image of the short axis view of the heart within the plurality of provided images.

250. The method of claim 243, further comprising assessing a short axis within the region of interest comprising:

assessing a position of a first point by intersecting an image of a two chamber view of the heart with an image of a four chamber view of the heart and a substantially first image of a short axis view of the heart within the plurality of provided images; and

assessing a position of a second point by intersecting an image of a two chamber view of the heart with an image of a four chamber view of the heart and a substantially final image of a short axis view of the heart within the plurality of provided images.

251. The method of claim 250, further comprising forming a shape using the first and second points as vertices to assist in approximating optimal third center.

252. The method of claim 221, wherein the assessed motion comprises motion contributed to movement of the heart.

253. The method of claim 221, wherein the first method is fully automated.

254. The method of claim 221, wherein the second method is fully automated.

255. The method of claim 221, wherein the first and the second methods are fully automated.

256. The method of claim 221, wherein the second method comprises using a boundary based method comprising:

dividing at least one image into a plurality of sections; and

assigning a value to at least one of the sections, wherein the value is a function of a feature of the section, wherein assigning the value comprises comparing the feature of the section to the feature of one or more adjacent sections.

257. The method of claim 221, further comprising creating at least one second image using the computer system, wherein at least a portion of the second image appears at least three-dimensional.

258. The method of claim 221, further comprising using the assessed contour to assess an area of at least a portion of the human heart.

259. The method of claim 221, further comprising using the assessed contour to assess a volume of at least a portion of the human heart.

260. The method of claim 221, further comprising:

providing a plurality of images of the heart tissue to a computer system, wherein a heart is in a substantially expanded condition; and

assessing an end diastolic volume of the heart by using the computer system to assess areas on the images.

261. The method of claim 221, further comprising:

providing a plurality of images of the heart tissue to a computer system, wherein a heart is in a substantially contracted condition; and

assessing an end systolic volume of the heart by using the computer system to assess areas on the images.

262. The method of claim 221, further comprising:

providing a plurality of images of the heart tissue to a computer system;

assessing a first volume and a second volume of the heart by using the computer system to assess areas on the images; and

using the first volume and the second volume to assess an ejection fraction of a human heart.

263. The method of claim 221, further comprising assessing a shape of the heart tissue by using the computer system to assess a curvature of at least a portion of the assessed contour.

264. The method of claim 221, further comprising:

providing at least two images of the heart tissue, a velocity of fluid through a portion of a human heart, and a time frame over which the images were collected to a computer system; and

assessing fluid flow through a portion of an aorta by using the computer system to assess areas on the images.

265. The method of claim 221, further comprising:

providing at least two images of the heart tissue and a velocity as a function of time of blood through a portion of an aorta to a computer system; and

assessing a mitral regurgitation of a heart by using the computer system to assess at least a first and second volume of a portion of the heart and blood flow through a portion of the heart.

266. The method of claim 221, further comprising:

providing at least two images of the heart tissue to a computer system, wherein at least one image comprises an enhanced portion; and

enhancing at least a portion of at least one image by combining at least a portion of at least one of the images with at least the enhanced portion of a second image.

267. The method of claim 221, further comprising:

identifying a position of a left ventricle of the heart using the optimal center;

identifying a position of a right ventricle of the heart based upon a position of the identified left ventricle; and

assessing a position of a septum wall substantially positioned between the left and right ventricles using the identified positions of the left and right ventricles.

268. The method of claim 221, further comprising:

assessing a first length of a perimeter of at least a portion of the human heart and a second length of at least a portion of scar tissue using the assessed contour; and

assessing a state of the heart tissue using the assessed first and second length.

269. The method of claim 268, further comprising dividing the second length by the first length.

270. The method of claim 221, further comprising:

assessing a position of a left ventricle of the heart using the optimal center;

assessing a position of non-viable heart tissue in the left ventricle;

excluding at least a portion of the non-viable tissue using the computer to form a contractile left ventricle;

assessing an end systolic volume and an end diastolic volume of the contractile left ventricle by using the computer system to assess areas on the images; and

assessing a contractile ejection fraction from the end systolic volume and the end diastolic volume.

271. The method of claim 221, further comprising:

assessing a length of at least one chordae tether using the assessed contour to assess at least one distance between at least one papillary muscle and a mitral valve.

272. The method of claim 221, further comprising:

assessing a position of a left ventricle of the heart using the optimal center;

assessing an end systolic volume and an end diastolic volume of the left ventricle by using the computer system to assess areas on the images; and

assessing a diskinetic aneurysm based on the end systolic volume and the end diastolic volume.

273. The method of claim 221, further comprising:

identifying a position of a left ventricle of the heart using the optimal center;

identifying a position of a right ventricle of the heart based upon a position of the identified left ventricle;

assessing an end systolic volume of the left and right ventricles over a complete cardiac cycle by using the computer system to assess areas on the images; and

assessing a difference in time of an occurrence of the end systolic volumes of the left and right ventricles.

274. The method of claim 221, further comprising:

providing two or more images of the heart tissue, wherein at least a portion of two or more of the images are enhanced;

assessing a position of a left ventricle of the heart using the optimal center; and

assessing an end systolic volume and an end diastolic volume of the left ventricle by using the computer system to assess areas on the images to assess a state of the heart tissue.

275. The method of claim 174, further comprising assessing relative strain placed on heart tissue by comparing areas on the images of the end systolic volume and an end diastolic volume.

276. The method of claim 221, further comprising:

assessing a position of a left ventricle of the heart using the optimal center;

assessing a volume and an inner surface area of the left ventricle by using the computer system to assess areas on the images; and

determining an effective height of the heart by dividing the volume by the inner surface area to assess a state of a dilation of the heart.

277. The method of claim 221, further comprising:

identifying a position of a left ventricle of the heart using the optimal center;

assessing a first thickness of a left ventricle wall in a diastolic state and a second thickness of a left ventricle wall in a systolic state within a complete cardiac cycle by using the computer system to assess areas on the images; and

extrapolating data by assessing a relationship between the assessed first and second thicknesses and time.

278. The method of claim 221, further comprising:

identifying a position of at least a left ventricle of the heart using the optimal center;

assessing a boundary of at least the left ventricle over at least one complete cardiac cycle using the assessed contour; and

determining an order of contraction of portions of the assessed boundary using the assessed boundary over the cardiac cycle.

279. The method of claim 221, further comprising:

providing a first plurality of images of the heart tissue to the computer system, wherein the first plurality of images comprises a two chamber view of the heart along a long axis;

providing at least a second plurality of images of the heart tissue to the computer system, wherein the second plurality of images comprises a four chamber view of the heart along a long axis;

using the computer system to assess at least two positions along a perimeter of a mitral valve from each of the first plurality of images and the second plurality of images; and

assessing a mitral valve orifice area using the at least four assessed positions.

280. The method of claim 221, further comprising:

providing a first plurality of images of the heart tissue to the computer system, wherein the first plurality of images is procured within a first cardiac cycle, and wherein the first cardiac cycle occurs before a cardiac intervention;

providing a second plurality of images of the heart tissue to the computer system, wherein the second plurality of images is procured within a second cardiac cycle, and wherein the second cardiac cycle occurs after a cardiac intervention; and

assessing a state of the heart tissue by comparing the first plurality of images to the second plurality of images using the computer system.

281. The method of claim 221, further comprising:

identifying a position of a left ventricle of the heart using the optimal center;

assessing an end systolic volume and an end diastolic volume of the left ventricle over a complete cardiac cycle by using the computer system to assess areas on the images; and

assessing a relationship between the assessed volumes and times during the cardiac cycle.

282. The method of claim 281, further comprising assessing a fluid ejection rate of the left ventricle to assess a state of the heart.

283. The method of claim 281, further comprising assessing a fluid filling rate of the left ventricle to assess a state of the heart.

284. The method of claim 221, further comprising:

providing a first plurality of images of the heart tissue to the computer system, wherein the first plurality of images is procured within a first cardiac cycle along a first axis;

providing at least a second plurality of images of the heart tissue to the computer system, wherein the second plurality of images is procured within a second cardiac cycle along a second axis; and

minimizing a cumulative distance between one or more first sections within the second plurality of images and one or more second sections, wherein the first section and the second section comprise a similar position within the heart tissue.

285. The method of claim 284, wherein the first axis comprises a long axis within the heart.

286. The method of claim 284, wherein the first axis comprises a short axis within the heart.

287. The method of claim 284, wherein the first plurality of images comprises a four chamber view of the heart.

288. The method of claim 284, wherein the first plurality of images comprises a two chamber view of the heart.

289. The method of claim 221, further comprising:

providing a first plurality of images of the heart tissue to the computer system, wherein the first plurality of images is procured within a first cardiac cycle;

providing a second plurality of images of the heart tissue to the computer system, wherein the second plurality of images is procured within a second cardiac cycle, and wherein the second cardiac cycle occurs when the heart tissue is under stress relative to the first cardiac cycle; and

assessing a state of the heart tissue by comparing the first plurality of images to the second plurality of images using the computer system.

290. The method of claim 289, further comprising stressing the heart in the second cardiac cycle by physical exertion beyond an average level for the heart tissue.

291. The method of claim 289, further comprising artificially inducing stress in the heart in the second cardiac cycle.

292. The method of claim 221, further comprising:

providing a first plurality of images of the heart tissue to the computer system, wherein the first plurality of images is procured with a first method;

providing a second plurality of images of the heart tissue to the computer system, wherein the second plurality of images is procured with a second method, and wherein the second plurality of images comprises at least some portions of heart tissue different from the heart tissue within the first plurality of images; and

assessing a state of the heart tissue by combining parts of the first plurality of images and the second plurality of images using the computer system.

293. The method of claim 292, wherein the first method comprises MRI.

294. The method of claim 292, wherein the first method comprises MRA.

295. The method of claim 292, wherein the first method comprises MRI, and wherein the second method comprises MRA.

296. The method of claim 221, further comprising:

assessing one or more features of the heart using the assessed contour; and

comparing one or more of the features to one or more predetermined parameters in a database to assess a candidacy of the heart for a cardiac intervention.

297. The method of claim 296, wherein the cardiac intervention comprises a revascularization procedure.

298. The method of claim 296, wherein the cardiac intervention comprises a ventricular reconstruction procedure.

299. The method of claim 296, wherein the cardiac intervention comprises a mitral valve repair procedure.

300. The method of claim 296, wherein the cardiac intervention comprises a defibrillator therapy procedure.

301. The method of claim 296, wherein the cardiac intervention comprises a biventricular pacing procedure.

302. The method of claim 296, wherein the cardiac intervention comprises a drug treatment procedure.

303. The method of claim 296, wherein the feature comprises a percentage of akinetic tissue.

304. The method of claim 296, wherein the feature comprises a percentage of non-viable tissue.

305. The method of claim 296, wherein the feature comprises an ejection fraction.

306. The method of claim 296, wherein the feature comprises a relative distance of at least one papillary muscle.

307. The method of claim 296, wherein the feature comprises a relative angle of at least one papillary muscle.

308. The method of claim 296, wherein the feature comprises a mitral regurgitation.

309. The method of claim 296, wherein the feature comprises a QRS.

310. The method of claim 296, wherein the feature comprises an end diastolic volume.

311. The method of claim 296, wherein the feature comprises a ventricular contraction.

312. The method of claim 296, wherein the feature comprises a peak ejection velocity.

313. The method of claim 221, further comprising assessing a cost to be charged to a user for using the method based on a number of times the user applies the method.

314. The method of claim 221, further comprising:

creating one or more multi-dimensional second images of the heart tissue using the assessed contour.

315. The method of claim 314, wherein at least one of the multi-dimensional second images comprises indicators representing non-viable tissue.

316. The method of claim 314, wherein at least one of the multi-dimensional second images comprises indicators representing akinetic tissue.

317. The method of claim 314, wherein at least one of the multi-dimensional second images comprises indicators representing ischemic tissue.

318. The method of claim 221, further comprising:

identifying a position of a left ventricle of the heart using the optimal center; and

creating one or more multi-dimensional second images of at least part of the left ventricle using the assessed contour and the computer system, wherein at least one of the multi-dimensional second images comprises indicators representing scar tissue data.

319. The method of claim 318, wherein the scar tissue data comprises a degree of transmurality.

320. The method of claim 318, wherein the scar tissue data comprises an endocardial surface area.

321. The method of claim 318, wherein the scar tissue data comprises an endocardial volume.

322. The method of claim 221, further comprising:

creating one or more multi-dimensional second images of at least part of the heart using the assessed contour and the computer system, wherein at least one of the multi-dimensional second images comprises indicators representing a thickness of at least a part of a heart wall.

323. A carrier medium configured to store program instructions, wherein the program instructions are executable to implement a method, comprising:

providing a plurality of images of at least a portion of a human body to a computer system, wherein at least two of the images comprise data from similar regions of the body taken at different times;

assessing motion in the at least two images to determine a region of interest using a first method performed by the computer system, wherein the region of interest comprises at least some heart tissue;

assessing a first center of the region of interest along a first axis;

assessing one or more possible second centers of the region of interest along a second axis;

approximating an optimal third center of the region of interest by comparing the first center of the region of interest and the one or more possible second centers of the region of interest; and

constraining a second method using the optimal third center, wherein the second method is performed by the computer system to assess a portion of a contour of one of the images of human heart tissue.

324. A system configured to facilitate diagnosis of a human heart, comprising:

a CPU; and

a system memory coupled to the CPU, wherein the system memory stores one or more computer programs executable by the CPU;

wherein at least one computer program is executable to:

provide a plurality of images of at least a portion of a human body to a computer system, wherein at least two of the images comprise data from similar regions of the body taken at different times;

assess motion in the at least two images to determine a region of interest using a first method performed by the computer system, wherein the region of interest comprises at least some heart tissue;

assess a first center of the region of interest along a first axis;

assess one or more possible second centers of the region of interest along a second axis;

approximate an optimal third center of the region of interest by comparing the first center of the region of interest and the one or more possible second centers of the region of interest; and

constrain a second method using the optimal third center, wherein the second method is performed by the computer system to assess a portion of a contour of one of the images of human heart tissue.

325. A method of assessing contours in images of human heart tissue, comprising:

providing a plurality of images of at least a portion of a human body to a computer system, wherein at least two of the images comprise data from similar regions of the body taken at different times;

assessing motion in the at least two images to determine a region of interest using a first method performed by the computer system, wherein the region of interest comprises at least some heart tissue;

assessing a first center of the region of interest;

approximating a second center of a template based on the first center of the region of interest; and

using the template in a second method performed by the computer system to assess a portion of a contour of one of the images of human heart tissue.

326. The method of claim 325, wherein the second method comprises an active appearance model.

327. The method of claim 325, further comprising identifying a left ventricle of the heart using the approximated second center.

328. The method of claim 325, wherein the second method comprises the Hough transform.

329. The method of claim 325, wherein the second method comprises a boundary based method.

330. The method of claim 329, further comprising assessing one or more centers of the boundary based method.

331. The method of claim 329, further comprising integrating, over time, one or more results of the boundary based method applied to one or more sections of the region of interest.

332. The method of claim 331, further comprising integrating one or more results of the time integration.

333. The method of claim 332, further comprising refining the approximated second center using the first center for each of the one or more sections.

334. The method of claim 325, wherein the plurality of images comprises data gathered over at least about one complete cardiac cycle.

335. The method of claim 325, wherein the plurality of images comprise data gathered over at least about 800 milliseconds.

336. The method of claim 325, further comprising:
dividing at least some of the provided images into a plurality of sections; and
calculating an average intensity for each section.

337. The method of claim 325, further comprising:
dividing at least some of the provided images into a plurality of sections;
calculating an average intensity for each section; and
creating a multi-dimensional image using the averaged intensities of each section of the image.

338. The method of claim 325, further comprising:
dividing at least some of the provided images into a plurality of sections;
calculating an average intensity for each section; and
calculating a variance of the intensity of each section from the average intensity.

339. The method of claim 325, further comprising:

dividing at least some of the provided images into a plurality of sections;

calculating an average intensity for each section;

calculating a variance of the intensity of each section from the average intensity; and

creating a multi-dimensional image using the variance of each section of the image.

340. The method of claim 325, further comprising:

dividing at least some of the provided images into a plurality of sections;

calculating an average intensity for each section;

calculating a variance of the intensity of each section from the average intensity; and

integrating at least some of the calculated variances.

341. The method of claim 325, further comprising:

dividing at least some of the provided images into a plurality of sections;

calculating an average intensity for each section;

calculating a variance of the intensity of each section from the average intensity;

integrating at least some of the calculated variances; and

creating a multi-dimensional image using the integrated variances of the image.

342. The method of claim 325, further comprising:

dividing at least some of the provided images into a plurality of sections;

calculating an average intensity for each section;

calculating a variance of the intensity of each section from the average intensity;

creating a multi-dimensional image using the integrated variances of the image; and

using a predetermined shape to assess a location of one or more substantially adjacent sections comprising a greatest average variance within the created multi-dimensional image.

343. The method of claim 325, further comprising:

dividing at least some of the provided images into a plurality of sections;

calculating an average intensity for each section;

calculating a variance of the intensity of each section from the average intensity;

creating a multi-dimensional image using the integrated variances of the image; and

using a predetermined shape to assess a location of one or more substantially adjacent sections comprising a greatest average variance within the created multi-dimensional image, wherein the predetermined shape comprises a rectangle of a predetermined size at least greater than an average human heart.

344. The method of claim 325, further comprising assessing a midpoint in an intersection between a short axis and a long axis within the region of interest.

345. The method of claim 344, further comprising assessing a long axis within the region of interest by:

assessing a position of a first point substantially within the middle of a mitral valve; and

assessing a position of a second point substantially adjacent an apex of a left ventricle of the heart.

346. The method of claim 345, further comprising forming a shape using the first and second points as vertices to assist in approximating the second center.

347. The method of claim 345, further comprising assessing the position of the first point by intersecting an image of a two chamber view of the heart with an image of a four chamber view of the heart and an image of a short axis view of the heart.

348. The method of claim 347, wherein the image of the short axis view of the heart comprises a substantially first image of the short axis view of heart within the plurality of provided images.

349. The method of claim 345, further comprising assessing the position of the second point by intersecting an image of a two chamber view of the heart with an image of a four chamber view of the heart and an image of a short axis view of the heart.

350. The method of claim 349, wherein the image of the short axis view of the heart comprises a substantially final image of the short axis view of the heart within the plurality of provided images.

351. The method of claim 344, further comprising assessing a short axis within the region of interest comprising:

assessing a position of a first point by intersecting an image of a two chamber view of the heart with an image of a four chamber view of the heart and a substantially first image of a short axis view of the heart within the plurality of provided images; and

assessing a position of a second point by intersecting an image of a two chamber view of the heart with an image of a four chamber view of the heart and a substantially final image of a short axis view of the heart within the plurality of provided images.

352. The method of claim 351, further comprising forming a shape using the first and second points as vertices to assist in approximating the second center.

353. The method of claim 325, wherein the assessed motion comprises motion contributed to movement of the heart.

354. The method of claim 325, wherein the first method is fully automated.

355. The method of claim 325, wherein the first and the second methods are fully automated.

356. The method of claim 325, wherein the second method comprises using a boundary based method comprising:

dividing at least one image into a plurality of sections; and

assigning a value to at least one of the sections, wherein the value is a function of a feature of the section, wherein assigning the value comprises comparing the feature of the section to the feature of one or more adjacent sections.

357. The method of claim 325, further comprising creating at least one second image using the computer system, wherein at least a portion of the second image appears at least three-dimensional.

358. The method of claim 325, further comprising using the assessed contour to assess an area of at least a portion of the human heart.

359. The method of claim 325, further comprising using the assessed contour to assess a volume of at least a portion of the human heart.

360. The method of claim 325, further comprising:

providing a plurality of images of the heart tissue to a computer system, wherein a heart is in a substantially expanded condition; and

assessing an end diastolic volume of the heart by using the computer system to assess areas on the images.

361. The method of claim 325, further comprising:

providing a plurality of images of the heart tissue to a computer system, wherein a heart is in a substantially contracted condition; and

assessing an end systolic volume of the heart by using the computer system to assess areas on the images.

362. The method of claim 325, further comprising:

providing a plurality of images of the heart tissue to a computer system;

assessing a first volume and a second volume of the heart by using the computer system to assess areas on the images; and

using the first volume and the second volume to assess an ejection fraction of a human heart.

363. The method of claim 325, further comprising assessing a shape of the heart tissue by using the computer system to assess a curvature of at least a portion of the assessed contour.

364. The method of claim 325, further comprising:

providing at least two images of the heart tissue, a velocity of fluid through a portion of a human heart, and a time frame over which the images were collected to a computer system; and

assessing fluid flow through a portion of an aorta by using the computer system to assess areas on the images.

365. The method of claim 325, further comprising:

providing at least two images of the heart tissue and a velocity as a function of time of blood through a portion of an aorta to a computer system; and

assessing a mitral regurgitation of a heart by using the computer system to assess at least a first and second volume of a portion of the heart and blood flow through a portion of the heart.

366. The method of claim 325, further comprising:

providing at least two images of the heart tissue to a computer system, wherein at least one image comprises an enhanced portion; and

enhancing at least a portion of at least one image by combining at least a portion of at least one of the images with at least the enhanced portion of a second image.

367. A carrier medium configured to store program instructions, wherein the program instructions are executable to implement a method, comprising:

providing a plurality of images of at least a portion of a human body to a computer system, wherein at least two of the images comprise data from similar regions of the body taken at different times;

assessing motion in the at least two images to determine a region of interest using a first method performed by the computer system, wherein the region of interest comprises at least some heart tissue;

assessing a first center of the region of interest;

approximating a second center of a template based on the first center of the region of interest; and

using the template in a second method performed by the computer system to assess a portion of a contour of one of the images of human heart tissue.

368. A system configured to facilitate diagnosis of a human heart, comprising:

a CPU; and

a system memory coupled to the CPU, wherein the system memory stores one or more computer programs executable by the CPU;

wherein at least one computer program is executable to:

provide a plurality of images of at least a portion of a human body to a computer system, wherein at least two of the images comprise data from similar regions of the body taken at different times;

assess motion in the at least two images to determine a region of interest using a first method performed by the computer system, wherein the region of interest comprises at least some heart tissue;

assess a first center of the region of interest;

approximate a second center of a template based on the first center of the region of interest; and

use the template in a second method performed by the computer system to assess a portion of a contour of one of the images of human heart tissue.

369. A method of assessing contours in images of human heart tissue, comprising:

providing a plurality of images of at least a portion of a human body to a computer system, wherein at least two of the images comprise data from similar regions of the body taken at different times;

assessing motion in the at least two images to determine a region of interest using a first method performed by the computer system, wherein the region of interest comprises at least a left and a right ventricle of a heart;

assessing a first center of the region of interest;

approximating a second center of a template based on the first center of the region of interest;

identifying the left ventricle of the heart using the approximated second center; and

using the template in a second method performed by the computer system to assess a portion of a contour of one of the images of human heart tissue.

370. A method of visually guiding heart surgery, comprising:

creating at least one image of an optimized treatment of a heart, wherein at least one of the images comprises at least one heart feature;

assessing a position of at least one similar heart feature in at least one second image of the heart tissue, wherein the second image comprises a substantially current time frame; and

minimizing a cumulative distance between one or more similar heart features within the optimized heart treatment image and the second image.

371. The method of claim 370, further comprising:

providing to a computer system at least one image of heart tissue from the heart, wherein the image comprises one or more heart features;

performing a first modification of at least one feature of one or more images of heart tissue;

performing at least one second modification of at least one of the features, wherein the second modification is performed independently of the first modification; and

comparing at least one effect of the first modification to at least one effect of the second modification, or comparing at least one effect of the second modification to at least one effect of the first modification, to assess the optimized treatment for the heart.

372. The method of claim 370, wherein at least one of the images comprises one or more heart features, wherein at least one of the images comprises a portion in grayscale, and wherein the portion in grayscale comprises a range of values, the method further comprising:

applying a filter to the portion of the image in grayscale to remove a part of the image comprising a predetermined range of values; and

creating at least a second enhanced image comprising the predetermined range of values from the filtered portion of the image.

373. The method of claim 372, further comprising converting the grayscale image comprising the range of values to a color image using a color gradient based on the range of values.

374. The method of claim 372, further comprising converting the grayscale image comprising the range of values to a color image using a color gradient based on the range of values, wherein the predetermined range is a range based on a specific color.

375. The method of claim 372, further comprising rescaling the predetermined range of the removed part of the image to the range of values.

376. The method of claim 370, wherein at least one of the images comprises the heart in a substantially expanded condition, and wherein at least one of the images comprises the heart in a substantially contracted condition, the method further comprising:

creating a model of at least a portion of an endocardial wall of a left ventricle of the heart, wherein the model comprises the left ventricle in at least an end-systolic state and an end-diastolic state;

assessing a movement of a part of the endocardial wall model between the end-systolic state and the end-diastolic state; and

comparing the movement to a predetermined standard to assess a state of the heart.

377. The method of claim 376, wherein the predetermined standard comprises an average of a plurality of normal hearts.

378. The method of claim 376, further comprising displaying the state of the heart visually within the model.

379. The method of claim 376, further comprising displaying the state of the heart visually within the model using a color gradient.

380. The method of claim 376, further comprising matching a first part of the endocardial wall of the model in the end-systolic state with a second part of the endocardial wall of the model in the end-diastolic state.

381. The method of claim 376, further comprising matching a first part of the endocardial wall of the model in the end-systolic state with a second part of the endocardial wall of the model in the end-diastolic state using one or more normals associated with the first and second parts.

382. The method of claim 376, further comprising assessing a position of hyper-kinetic tissue.

383. The method of claim 376, further comprising assessing a position of hyper-kinetic tissue wherein the movement of the part of the endocardial wall model of hyper-kinetic

tissue comprises two or more standard deviations greater than the predetermined standard.

384. The method of claim 376, further comprising assessing a position of akinetic tissue wherein the movement of the part of the endocardial wall model of akinetic tissue comprises two or more standard deviations less than the predetermined standard.

385. The method of claim 376, further comprising assessing a position of normal tissue wherein the movement of the part of the endocardial wall model of normal tissue comprises two or fewer standard deviations greater or less than the predetermined standard.

386. The method of claim 376, further comprising assessing a position of diskinetic tissue wherein the movement of the part of the endocardial wall model of diskinetic tissue comprises a negative movement.

387. The method of claim 376, further comprising:

assessing a number of parts wherein the movement is greater than a range from the predetermined standard; and

dividing the number of parts by a total number of parts.

388. The method of claim 376, further comprising:

assessing a first time period for when the movement of the part substantially begins; and

dividing the first time period by a second time period, wherein the second time period comprises a difference in time between the occurrence of the end-systolic state and the end-diastolic state.

389. A method of visually guiding heart surgery, comprising:

providing to a computer system at least one image of heart tissue from the heart, wherein the image comprises one or more heart features;

performing a first modification of at least one feature of one or more images of heart tissue;

performing at least one second modification of at least one of the features, wherein the second modification is performed independently of the first modification;

comparing at least one effect of the first modification to at least one effect of the second modification, or comparing at least one effect of the second modification to at least one effect of the first modification, to assess an optimized treatment for the heart;

creating one or more images of the optimized treatment of the heart, wherein at least one of the optimized treatment images comprises at least one feature;

assessing a position of at least one similar heart feature in at least one second image of the heart tissue, wherein at least the second image comprises a substantially current time frame; and

minimizing a cumulative distance between one or more similar heart features within at least one of the optimized treatment images and at least the second image.

390. The method of claim 389, wherein at least one of the images comprises one or more heart features, wherein at least one of the images comprises a portion in grayscale, and wherein the portion in grayscale comprises a range of values, the method further comprising:

applying a filter to the portion of the image in grayscale to remove a part of the image comprising a predetermined range of values; and

creating at least a second enhanced image comprising the predetermined range of values from the filtered portion of the image.

391. The method of claim 390, further comprising converting the grayscale image comprising the range of values to a color image using a color gradient based on the range of values.

392. The method of claim 390, further comprising converting the grayscale image comprising the range of values to a color image using a color gradient based on the range of values, wherein the predetermined range is a range based on a specific color.

393. The method of claim 390, further comprising rescaling the predetermined range of the removed part of the image to the range of values.

394. The method of claim 389, wherein at least one of the images comprises the heart in a substantially expanded condition, and wherein at least one of the images comprises the heart in a substantially contracted condition, the method further comprising:

creating a model of at least a portion of an endocardial wall of a left ventricle of the heart, wherein the model comprises the left ventricle in at least an end-systolic state and an end-diastolic state;

assessing a movement of a part of the endocardial wall model between the end-systolic state and the end-diastolic state; and

comparing the movement to a predetermined standard to assess a state of the heart.

395. The method of claim 394, wherein the predetermined standard comprises an average of a plurality of normal hearts.

396. The method of claim 394, further comprising displaying the state of the heart visually within the model.

397. The method of claim 394, further comprising displaying the state of the heart visually within the model using a color gradient.

398. The method of claim 394, further comprising matching a first part of the endocardial wall of the model in the end-systolic state with a second part of the endocardial wall of the model in the end-diastolic state.

399. The method of claim 394, further comprising matching a first part of the endocardial wall of the model in the end-systolic state with a second part of the

endocardial wall of the model in the end-diastolic state using one or more normals associated with the first and second parts.

400. The method of claim 394, further comprising assessing a position of hyper-kinetic tissue.

401. The method of claim 394, further comprising assessing a position of hyper-kinetic tissue wherein the movement of the part of the endocardial wall model of hyper-kinetic tissue comprises two or more standard deviations greater than the predetermined standard.

402. The method of claim 394, further comprising assessing a position of akinetic tissue wherein the movement of the part of the endocardial wall model of akinetic tissue comprises two or more standard deviations less than the predetermined standard.

403. The method of claim 394, further comprising assessing a position of normal tissue wherein the movement of the part of the endocardial wall model of normal tissue comprises two or fewer standard deviations greater or less than the predetermined standard.

404. The method of claim 394, further comprising assessing a position of diskinetic tissue wherein the movement of the part of the endocardial wall model of diskinetic tissue comprises a negative movement.

405. The method of claim 394, further comprising:

assessing a number of parts wherein the movement is greater than a range from the predetermined standard; and

dividing the number of parts by a total number of parts.

406. The method of claim 394, further comprising:

assessing a first time period for when the movement of the part substantially begins; and

dividing the first time period by a second time period, wherein the second time period comprises a difference in time between the occurrence of the end-systolic state and the end-diastolic state.

407. A method of enhancing at least a portion of an image of human heart tissue, comprising:

providing to a computer system one or more images of heart tissue from the heart, wherein at least one of the images comprises one or more heart features, wherein at least one of the images comprises a portion in grayscale, and wherein the portion in grayscale comprises a range of values;

applying a filter to the portion of the image in grayscale to remove a part of the image comprising a predetermined range of values; and

creating at least a second enhanced image comprising the predetermined range of values from the filtered portion of the image.

408. The method of claim 407, further comprising converting the grayscale image comprising the range of values to a color image using a color gradient based on the range of values.

409. The method of claim 407, further comprising converting the grayscale image comprising the range of values to a color image using a color gradient based on the range of values, wherein the predetermined range is a range based on a specific color.

410. The method of claim 407, further comprising rescaling the predetermined range of the removed part of the image to the range of values.

411. A method of assessing a state of human heart tissue, comprising:

providing to a computer system a plurality of images of heart tissue, wherein at least one of the images comprises the heart in a substantially expanded condition, and

wherein at least one of the images comprises the heart in a substantially contracted condition;

creating a model of at least a portion of an endocardial wall of a left ventricle of the heart, wherein the model comprises the left ventricle in at least an end-systolic state and an end-diastolic state;

assessing a movement of a part of the endocardial wall model between the end-systolic state and the end-diastolic state; and

comparing the movement to a predetermined standard to assess a state of the heart.

412. The method of claim 411, wherein the predetermined standard comprises an average of a plurality of normal hearts.

413. The method of claim 411, further comprising displaying the state of the heart visually within the model.

414. The method of claim 411, further comprising displaying the state of the heart visually within the model using a color gradient.

415. The method of claim 411, further comprising matching a first part of the endocardial wall of the model in the end-systolic state with a second part of the endocardial wall of the model in the end-diastolic state.

416. The method of claim 411, further comprising matching a first part of the endocardial wall of the model in the end-systolic state with a second part of the endocardial wall of the model in the end-diastolic state using one or more normals associated with the first and second parts.

417. The method of claim 411, further comprising assessing a position of hyper-kinetic tissue.

418. The method of claim 411, further comprising assessing a position of hyper-kinetic tissue wherein the movement of the part of the endocardial wall model of hyper-kinetic tissue comprises two or more standard deviations greater than the predetermined standard.

419. The method of claim 411, further comprising assessing a position of akinetic tissue wherein the movement of the part of the endocardial wall model of akinetic tissue comprises two or more standard deviations less than the predetermined standard.

420. The method of claim 411, further comprising assessing a position of normal tissue wherein the movement of the part of the endocardial wall model of normal tissue comprises two or fewer standard deviations greater or less than the predetermined standard.

421. The method of claim 411, further comprising assessing a position of diskinetic tissue wherein the movement of the part of the endocardial wall model of diskinetic tissue comprises a negative movement.

422. The method of claim 411, further comprising assessing a number of parts wherein the movement is greater than a range from the predetermined standard.

423. The method of claim 411, further comprising:

assessing a number of parts wherein the movement is greater than a range from the predetermined standard; and

dividing the number of parts by a total number of parts.

424. The method of claim 411, further comprising:

assessing a first time period for when the movement of the part substantially begins; and

dividing the first time period by a second time period, wherein the second time period comprises a difference in time between the occurrence of the end-systolic state and the end-diastolic state.

425. A method of diagnosing a human heart, comprising:

providing one or more images of heart tissue from the heart to a computer system; and

comparing at least one structural element of at least one image of the one or more images of heart tissue from the heart to one or more reference structural elements in a database to assess a state of the heart.

426. The method of claim 425, wherein at least one of the reference structural elements comprises an image.

427. The method of claim 425, wherein at least one of the reference structural elements comprises a physiological factor.

428. The method of claim 425, wherein at least one of the reference structural elements comprises at least a portion of an image.

429. The method of claim 425, wherein at least one of the reference structural elements comprises a numerical element.

430. The method of claim 425, wherein at least one of the reference structural elements comprises a numerical element derived at least in part from at least a portion of an image.

431. The method of claim 425, wherein comparing at least one structural element comprises using the computer system to perform the comparison.

432. The method of claim 425, wherein the database comprises clinical data .

433. The method of claim 432, wherein the clinical data comprises data derived from one or more surgical procedures.

434. The method of claim 425, wherein the computer system divides at least one image of human heart tissue into a plurality of sections.

435. The method of claim 425, further comprising:

providing two or more images of heart tissue to the computer system, and

extrapolating at least a portion of at least one structural element from at least two images of human heart tissue.

436. The method of claim 425, further comprising:

providing two or more images of heart tissue to the computer system; and

using at least two images of heart tissue to create at least a second image of human heart tissue, wherein at least a portion of the second image appears at least three-dimensional.

437. The method of claim 425, further comprising:

providing a plurality of images of heart tissue to the computer system; and

using at least some of the plurality of images to create at least a second image of human heart tissue, wherein at least a portion of the second image appears at least four-dimensional.

438. The method of claim 437, wherein one of the dimensions comprises time.

439. The method of claim 437, wherein at least one of the dimensions comprises at least one physiological factor.

440. The method of claim 439, wherein at least one physiological factor comprises hormone B-type natriuretic peptide.

441. The method of claim 425, further comprising creating one or more images of the assessed state of the heart.

442. The method of claim 441, wherein at least a portion of at least one of the images appears three-dimensional.

443. The method of claim 441, wherein at least one image of the assessed state of the heart comprises color gradients.

444. A method of diagnosing a human heart, comprising:

providing to a computer system a plurality of images of heart tissue from the heart;

using the plurality of images to create at least one second image of human heart tissue using the computer system, wherein at least a portion of the second image appears at least three-dimensional, and wherein the second image comprises one or more structural elements; and

comparing at least one structural element to one or more heart reference structural elements in a database to assess a state of the heart.

445. The method of claim 444, wherein at least one of the reference structural elements comprises an image.

446. The method of claim 444, wherein at least one of the reference structural elements comprises a portion of an image.

447. The method of claim 444, wherein at least one of the reference structural elements comprises a physiological factor.

448. The method of claim 444, wherein at least one of the reference structural elements comprises a numerical element.

449. The method of claim 444, wherein at least one of the reference structural elements comprises a numerical element derived at least in part from at least a portion of an image.

450. The method of claim 444, wherein comparing at least one structural element comprises using the computer system to perform the comparison.

451. The method of claim 444, wherein the database comprises data from one or more surgical procedures.

452. The method of claim 444, wherein the computer system divides the plurality of images into a plurality of sections.

453. The method of claim 444, further comprising extrapolating at least a portion of at least one structural element from the plurality of images of human heart tissue provided to the computer system.

454. The method of claim 444, further comprising using the plurality of images to create at least a second image, wherein at least a portion of the second image appears at least four-dimensional.

455. The method of claim 454, wherein one of the four-dimensions comprises time.

456. The method of claim 454, wherein at least one of the four-dimensions comprises at least one physiological factor.

457. The method of claim 456, wherein at least one physiological factor comprises hormone B-type natriuretic peptide.

458. The method of claim 444, further comprising creating one or more images of the assessed state of the heart.

459. The method of claim 458, wherein at least one image of the assessed state of the heart comprises at least a portion appearing at least three-dimensional.

460. The method of claim 458, wherein at least one image of the assessed state of the heart comprises color gradients.

461. A method of diagnosing a human heart, comprising:

providing one or more images of heart tissue from the heart to a computer system; and

comparing at least one numerical element derived from at least one structural element of at least one image of the one or more images of heart tissue from the heart to one or more reference structural elements in a database to assess a state of the heart.

462. The method of claim 461, wherein at least one of the reference structural elements comprises an image.

463. The method of claim 461, wherein at least one of the reference structural elements comprises a physiological factor.

464. The method of claim 461, wherein at least one of the reference structural elements comprises at least a portion of an image.

465. The method of claim 461, wherein at least one of the reference structural elements comprises a numerical element.

466. The method of claim 461, wherein at least one of the reference structural elements comprises a numerical element derived at least in part from at least a portion of an image.

467. The method of claim 461, wherein comparing at least one structural element comprises using the computer system to perform the comparison.

468. The method of claim 461, wherein the database comprises clinical data .

469. The method of claim 468, wherein the database comprises data from one or more surgical procedures.

470. The method of claim 461, wherein the computer system divides at least one image of human heart tissue into a plurality of sections.

471. The method of claim 461, further comprising:

providing two or more images of heart tissue to the computer system, and

extrapolating at least a portion of at least one structural element from at least two images of human heart tissue.

472. The method of claim 461, further comprising:

providing two or more images of heart tissue to the computer system; and

using at least two images of heart tissue to create at least a second image of human heart tissue, wherein at least a portion of the second image appears at least three-dimensional.

473. The method of claim 461, further comprising:

providing a plurality of images of heart tissue to the computer system; and

using at least some of the plurality of images to create at least a second image of human heart tissue, wherein at least a portion of the second image appears at least four-dimensional.

474. The method of claim 473, wherein one of the dimensions comprises time.

475. The method of claim 473, wherein at least one of the dimensions comprises at least one physiological factor.

476. The method of claim 475, wherein at least one physiological factor comprises hormone B-type natriuretic peptide.

477. The method of claim 461, further comprising creating one or more images of the assessed state of the heart.

478. The method of claim 477, wherein at least a portion of at least one of the images appears three-dimensional.

479. The method of claim 477, wherein at least one image of the assessed state of the heart comprises color gradients.

480. A method of diagnosing a human heart, comprising:

providing one or more images of heart tissue from the heart to a computer system; and

comparing at least one structural element of at least one image of the one or more images of heart tissue from the heart to one or more reference structural elements in a database to assess a state of the heart, wherein at least one of the structural elements comprises a physiological factor.

481. The method of claim 480, wherein at least one of the reference structural elements comprises an image.

482. The method of claim 480, wherein at least one of the reference structural elements comprises a physiological factor.

483. The method of claim 480, wherein at least one of the reference structural elements comprises at least a portion of an image.

484. The method of claim 480, wherein at least one of the reference structural elements comprises a numerical element.

485. The method of claim 480, wherein at least one of the reference structural elements comprises a numerical element derived at least in part from at least a portion of an image.

486. The method of claim 480, wherein comparing at least one structural element comprises using the computer system to perform the comparison.

487. The method of claim 480, wherein the database comprises clinical data .

488. The method of claim 487, wherein the database comprises data from one or more surgical procedures.

489. The method of claim 480, wherein the computer system divides at least one image of human heart tissue into a plurality of sections.

490. The method of claim 480, further comprising:

providing two or more images of heart tissue to the computer system, and

extrapolating at least a portion of at least one structural element from at least two images of human heart tissue.

491. The method of claim 480, further comprising:

providing two or more images of heart tissue to the computer system; and

using at least two images of heart tissue to create at least a second image of human heart tissue, wherein at least a portion of the second image appears at least three-dimensional.

492. The method of claim 480, further comprising:

providing a plurality of images of heart tissue to the computer system; and

using at least some of the plurality of images to create at least a second image of human heart tissue, wherein at least a portion of the second image appears at least four-dimensional.

493. The method of claim 492, wherein one of the dimensions comprises time.

494. The method of claim 492, wherein at least one of the dimensions comprises at least one physiological factor.

495. The method of claim 494, wherein at least one physiological factor comprises hormone B-type natriuretic peptide.

496. The method of claim 480, further comprising creating one or more images of the assessed state of the heart.

497. The method of claim 496, wherein at least a portion of at least one of the images appears three-dimensional.

498. The method of claim 496, wherein at least one image of the assessed state of the heart comprises color gradients.

499. A system configured to facilitate diagnosis of a human heart, comprising:

a CPU; and

a system memory coupled to the CPU, wherein the system memory stores one or more computer programs executable by the CPU;

wherein at least one computer program is executable to:

compare one or more features of one or more images of heart tissue to one or more heart reference features in a database to assess a state of the human heart.

500. The system of claim 499, wherein the database comprises data from one or more expert opinions.

501. The system of claim 499, wherein the database comprises clinical data.

502. The system of claim 499, wherein at least one of the computer programs divides at least one image into a plurality of sections.

503. The system of claim 499, wherein at least one of the computer programs is further executable to extrapolate at least one feature from at least one image of the heart tissue.

504. The system of claim 499, wherein at least one of the computer programs is further executable to use a plurality of heart tissue images to create at least a portion of an image of the heart tissue which appears four-dimensional.

505. The system of claim 504, wherein one of the four dimensions comprises time.

506. The system of claim 504, wherein at least one of the four dimensions comprises at least one physiological factor.

507. The system of claim 506, wherein at least one physiological factor comprises hormone B-type natriuretic peptide.

508. The system of claim 499, wherein at least one of the computer programs is further executable to create one or more images of the assessed state of the heart.

509. The system of claim 508, wherein at least one image comprises at least a portion which appears three-dimensional.

510. The system of claim 508, wherein at least one image comprises progressive coloring.

511. The system of claim 510, wherein the progressive coloring comprises grayscale.

512. A carrier medium configured to store program instructions, wherein the program instructions are executable to implement a method, comprising:

comparing at least one feature of one or more images of heart tissue to heart reference features in a database to assess a state of the heart.

513. The carrier medium of claim 512, wherein the database comprises data from one or more expert opinions.

514. The carrier medium of claim 512, wherein the database comprises clinical data.

515. The carrier medium of claim 512, wherein at least one of the computer programs divides at least one image of human heart tissue into a plurality of sections.

516. The carrier medium of claim 512, wherein the program instructions are further executable to implement:

extrapolating at least one feature from at least one image of the heart tissue.

517. The carrier medium of claim 512, wherein the program instructions are further executable to implement:

using at least one image of human heart tissue to create at least a portion of an image of the heart tissue which appears three-dimensional.

518. The carrier medium of claim 512, wherein the program instructions are further executable to implement:

using a plurality of images to create at least a portion of an image of the heart tissue which appears four-dimensional.

519. The carrier medium of claim 518, wherein one of the dimensions comprises time.

520. The carrier medium of claim 518, wherein at least one of the dimensions comprises at least one physiological factor.

521. The carrier medium of claim 520, wherein at least one physiological factor comprises hormone B-type natriuretic peptide.

522. The carrier medium of claim 512, wherein the program instructions are further executable to implement creating one or more images of the assessed state of the heart.

523. The carrier medium of claim 522, wherein at least one image comprises at least a portion which appears three-dimensional.

524. The carrier medium of claim 522, wherein at least one image comprises progressive coloring.

525. The carrier medium of claim 524, wherein the progressive coloring comprises grayscale.

450. The system of claim 499, wherein at least one of the heart reference features comprises an image.

451. The system of claim 499, wherein at least one of the heart reference features comprises at least a portion of an image.

452. The system of claim 499, wherein at least one of the heart reference features comprises a numerical feature.

453. The system of claim 499, wherein at least one of the heart reference features comprises a numerical feature derived at least in part from at least a portion of an image.

454. The system of claim 499, wherein at least one computer program is further executable to calculate at least one feature from at least one image of the heart tissue.

455. The carrier medium of claim 512, wherein at least one of the heart reference features comprises an image.

456. The carrier medium of claim 512, wherein at least one of the heart reference features comprises at least a portion of an image.

457. The carrier medium of claim 512, wherein at least one of the heart reference features comprises a numerical feature.

458. The carrier medium of claim 512, wherein at least one of the heart reference features comprises a numerical feature derived at least in part from at least a portion of an image.

459. The carrier medium of claim 512, wherein the program instructions are further executable to implement a method comprising:

calculating at least one feature from at least one image of the heart tissue.

460. The system of claim 499, wherein at least one of the heart reference features comprises a physiological factor.

461. The system of claim 499, wherein at least one of the computer programs is further executable to assess a volume of at least a portion of the heart tissue.

462. The system of claim 499, wherein at least one of the computer programs is further executable to:

compare a contrast between two or more sections in at least one image; and

assess a viability of the heart tissue.

463. The system of claim 499, wherein at least one of the computer programs is further executable to:

evaluate motion of at least one portion of at least one feature of one or more images of heart tissue; and

assess asynergy of the heart tissue.

464. The system of claim 499, wherein at least one of the computer programs is further executable to:

evaluate a curvature of at least a section of a portion of a heart comprising the heart tissue; and

assess a shape of at least the portion of the heart.

465. The system of claim 499, wherein at least one of the computer programs is further executable to:

assign at least one reference point to at least two images of the heart tissue;

evaluate a relative movement of at least one of the reference points between at least two images of the heart tissue; and

assess a viability of the heart tissue.

466. The system of claim 499, wherein at least one of the computer programs is further executable to:

determine at least a first and second volume of a portion of the heart tissue and blood flow through a portion of the heart; and

assess a mitral regurgitation with a provided velocity of a fluid through at least a portion of the aorta.

467. The carrier medium of claim 512, wherein at least one of the heart reference features comprises a physiological factor.

468. The system of claim 501, wherein the clinical data comprises data derived from one or more surgical procedures.

469. The carrier medium of claim 514, wherein the clinical data comprises data derived from one or more surgical procedures.

470. The carrier medium of claim 512, wherein the program instructions are further executable to implement:

assessing a volume of at least a portion of the heart tissue.

471. The carrier medium of claim 512, wherein the program instructions are further executable to implement:

comparing a contrast between two or more sections in at least one image; and

assessing a viability of the heart tissue.

472. The carrier medium of claim 512, wherein the program instructions are further executable to implement:

evaluating motion of at least one portion of at least one feature of one or more images of heart tissue; and

assessing asynergy of the heart tissue.

473. The carrier medium of claim 512, wherein the program instructions are further executable to implement:

evaluating a curvature of at least a section of a portion of a heart comprising the heart tissue; and

assessing a shape of at least the portion of the heart.

474. The carrier medium of claim 512, wherein the program instructions are further executable to implement:

assigning at least one reference point to at least two images of the heart tissue;

evaluating a relative movement of at least one of the reference points between at least two images of the heart tissue; and

assessing a viability of the heart tissue.

475. The carrier medium of claim 512, wherein the program instructions are further executable to implement:

determining at least a first and second volume of a portion of the heart tissue and blood flow through a portion of the heart; and

assessing a mitral regurgitation with a provided velocity of a fluid through at least a portion of the aorta.

476. A system configured to facilitate diagnosis of a human heart, comprising:

a CPU; and

a system memory coupled to the CPU, wherein the system memory stores one or more computer programs executable by the CPU;

wherein at least one computer program is executable to:

compare one or more features of one or more images of heart tissue to one or more heart reference features in a database to assess a state of the human heart, wherein at least one of the features comprises a numerical feature derived from one or more of the images of heart tissue.

477. The system of claim 476, wherein at least one of the heart reference features comprises an image.

478. The system of claim 476, wherein at least one of the heart reference features comprises at least a portion of an image.

479. The system of claim 476, wherein at least one of the heart reference features comprises a numerical feature.

480. The system of claim 476, wherein at least one of the heart reference features comprises a numerical feature derived at least in part from at least a portion of an image.

481. The system of claim 476, wherein at least one computer program is further executable to calculate at least one feature from at least one image of the heart tissue.

482. The system of claim 476, wherein at least one of the heart reference features comprises a physiological factor.

483. The system of claim 476, wherein the database comprises data from one or more expert opinions.

484. The system of claim 476, wherein the database comprises clinical data.

485. The system of claim 484, wherein the clinical data comprises data derived from one or more surgical procedures.

486. The system of claim 476, wherein at least one of the computer programs divides at least one image into a plurality of sections.

487. The system of claim 476, wherein at least one of the computer programs is further executable to extrapolate at least one feature from at least one image of the heart tissue.

488. The system of claim 476, wherein at least one of the computer programs is further executable to use a plurality of heart tissue images to create at least a portion of an image of the heart tissue which appears four-dimensional.

489. The system of claim 488, wherein one of the four dimensions comprises time.

490. The system of claim 488, wherein at least one of the four dimensions comprises at least one physiological factor.

491. The system of claim 490, wherein at least one physiological factor comprises hormone B-type natriuretic peptide.

492. The system of claim 476, wherein at least one of the computer programs is further executable to create one or more images of the assessed state of the heart.

493. The system of claim 492, wherein at least one image comprises at least a portion which appears three-dimensional.

494. The system of claim 492, wherein at least one image comprises progressive coloring.

495. The system of claim 494, wherein the progressive coloring comprises grayscale.

496. The system of claim 476, wherein at least one of the computer programs is further executable to assess a volume of at least a portion of the heart tissue.

497. The system of claim 476, wherein at least one of the computer programs is further executable to:

compare a contrast between two or more sections in at least one image; and

assess a viability of the heart tissue.

498. The system of claim 476, wherein at least one of the computer programs is further executable to:

evaluate motion of at least one portion of at least one feature of one or more images of heart tissue; and

assess asynergy of the heart tissue.

499. The system of claim 476, wherein at least one of the computer programs is further executable to:

evaluate a curvature of at least a section of a portion of a heart comprising the heart tissue; and

assess a shape of at least the portion of the heart.

500. The system of claim 476, wherein at least one of the computer programs is further executable to:

assign at least one reference point to at least two images of the heart tissue;

evaluate a relative movement of at least one of the reference points between at least two images of the heart tissue; and

assess a viability of the heart tissue.

501. The system of claim 476, wherein at least one of the computer programs is further executable to:

determine at least a first and second volume of a portion of the heart tissue and blood flow through a portion of the heart; and

assess a mitral regurgitation with a provided velocity of a fluid through at least a portion of the aorta.

502. A system configured to facilitate diagnosis of a human heart, comprising:

a CPU; and

a system memory coupled to the CPU, wherein the system memory stores one or more computer programs executable by the CPU;

wherein at least one computer program is executable to:

compare one or more features of one or more images of heart tissue to one or more heart reference features in a database to assess a state of the human heart, wherein at least one of the features comprises a physiological factor.

503. The system of claim 502, wherein at least one of the heart reference features comprises an image.

504. The system of claim 502, wherein at least one of the heart reference features comprises at least a portion of an image.

505. The system of claim 502, wherein at least one of the heart reference features comprises a numerical feature.

506. The system of claim 502, wherein at least one of the heart reference features comprises a numerical feature derived at least in part from at least a portion of an image.

507. The system of claim 502, wherein at least one computer program is further executable to calculate at least one feature from at least one image of the heart tissue.

508. The system of claim 502, wherein at least one of the heart reference features comprises a physiological factor.

509. The system of claim 502, wherein the database comprises data from one or more expert opinions.

510. The system of claim 502, wherein the database comprises clinical data.

511. The system of claim 510, wherein the clinical data comprises data derived from one or more surgical procedures.

512. The system of claim 502, wherein at least one of the computer programs divides at least one image into a plurality of sections.

513. The system of claim 502, wherein at least one of the computer programs is further executable to extrapolate at least one feature from at least one image of the heart tissue.

514. The system of claim 502, wherein at least one of the computer programs is further executable to use a plurality of heart tissue images to create at least a portion of an image of the heart tissue which appears four-dimensional.

515. The system of claim 514, wherein one of the four dimensions comprises time.

516. The system of claim 514, wherein at least one of the four dimensions comprises at least one physiological factor.

517. The system of claim 516, wherein at least one physiological factor comprises hormone B-type natriuretic peptide.

518. The system of claim 502, wherein at least one of the computer programs is further executable to create one or more images of the assessed state of the heart.

519. The system of claim 518, wherein at least one image comprises at least a portion which appears three-dimensional.

520. The system of claim 518, wherein at least one image comprises progressive coloring.

521. The system of claim 520, wherein the progressive coloring comprises grayscale.

522. The system of claim 502, wherein at least one of the computer programs is further executable to assess a volume of at least a portion of the heart tissue.

523. The system of claim 502, wherein at least one of the computer programs is further executable to:

compare a contrast between two or more sections in at least one image; and

assess a viability of the heart tissue.

524. The system of claim 502, wherein at least one of the computer programs is further executable to:

evaluate motion of at least one portion of at least one feature of one or more images of heart tissue; and

assess asynergy of the heart tissue.

525. The system of claim 502, wherein at least one of the computer programs is further executable to:

evaluate a curvature of at least a section of a portion of a heart comprising the heart tissue; and

assess a shape of at least the portion of the heart.

526. The system of claim 502, wherein at least one of the computer programs is further executable to:

assign at least one reference point to at least two images of the heart tissue;

evaluate a relative movement of at least one of the reference points between at least two images of the heart tissue; and

assess a viability of the heart tissue.

527. The system of claim 502, wherein at least one of the computer programs is further executable to:

determine at least a first and second volume of a portion of the heart tissue and blood flow through a portion of the heart; and

assess a mitral regurgitation with a provided velocity of a fluid through at least a portion of the aorta.

528. A carrier medium configured to store program instructions, wherein the program instructions are executable to implement a method, comprising:

comparing at least one feature of one or more images of heart tissue to heart reference features in a database to assess a state of the heart, wherein at least one of the features comprises a numerical feature derived from one or more of the images of heart tissue.

529. The carrier medium of claim 528, wherein at least one of the heart reference features comprises a physiological factor.

530. The carrier medium of claim 528, wherein at least one of the heart reference features comprises an image.

531. The carrier medium of claim 528, wherein at least one of the heart reference features comprises at least a portion of an image.

532. The carrier medium of claim 528, wherein at least one of the heart reference features comprises a numerical feature.

533. The carrier medium of claim 528, wherein at least one of the heart reference features comprises a numerical feature derived at least in part from at least a portion of an image.

534. The carrier medium of claim 528, wherein the program instructions are further executable to implement a method comprising:

calculating at least one feature from at least one image of the heart tissue.

535. The carrier medium of claim 528, wherein the database comprises data from one or more expert opinions.

536. The carrier medium of claim 528, wherein the database comprises clinical data.

537. The carrier medium of claim 536, wherein the clinical data comprises data derived from one or more surgical procedures.

538. The carrier medium of claim 528, wherein at least one of the computer programs divides at least one image of human heart tissue into a plurality of sections.

539. The carrier medium of claim 528, wherein the program instructions are further executable to implement a method comprising:

extrapolating at least one feature from at least one image of the heart tissue.

540. The carrier medium of claim 528, wherein the program instructions are further executable to implement a method comprising:

using at least one image of human heart tissue to create at least a portion of an image of the heart tissue which appears three-dimensional.

541. The carrier medium of claim 528, wherein the program instructions are further executable to implement a method comprising:

using a plurality of images to create at least a portion of an image of the heart tissue which appears four-dimensional.

542. The carrier medium of claim 541, wherein one of the dimensions comprises time.

543. The carrier medium of claim 541, wherein at least one of the dimensions comprises at least one physiological factor.

544. The carrier medium of claim 543, wherein at least one physiological factor comprises hormone B-type natriuretic peptide.

545. The carrier medium of claim 528, wherein the program instructions are further executable to implement a method comprising:

creating one or more images of the assessed state of the heart.

546. The carrier medium of claim 545, wherein at least one image comprises at least a portion which appears three-dimensional.

547. The carrier medium of claim 545, wherein at least one image comprises progressive coloring.

548. The carrier medium of claim 547, wherein the progressive coloring comprises grayscale.

549. The carrier medium of claim 528, wherein the program instructions are further executable to implement:

assessing a volume of at least a portion of the heart tissue.

550. The carrier medium of claim 528, wherein the program instructions are further executable to implement:

comparing a contrast between two or more sections in at least one image; and

assessing a viability of the heart tissue.

551. The carrier medium of claim 528, wherein the program instructions are further executable to implement:

evaluating motion of at least one portion of at least one feature of one or more images of heart tissue; and

assessing asynergy of the heart tissue.

552. The carrier medium of claim 528, wherein the program instructions are further executable to implement:

evaluating a curvature of at least a section of a portion of a heart comprising the heart tissue; and

assessing a shape of at least the portion of the heart.

553. The carrier medium of claim 528, wherein the program instructions are further executable to implement:

assigning at least one reference point to at least two images of the heart tissue;

evaluating a relative movement of at least one of the reference points between at least two images of the heart tissue; and

assessing a viability of the heart tissue.

554. The carrier medium of claim 528, wherein the program instructions are further executable to implement:

determining at least a first and second volume of a portion of the heart tissue and blood flow through a portion of the heart; and

assessing a mitral regurgitation with a provided velocity of a fluid through at least a portion of the aorta.

555. A carrier medium configured to store program instructions, wherein the program instructions are executable to implement a method, comprising:

comparing at least one feature of one or more images of heart tissue to heart reference features in a database to assess a state of the heart, wherein at least one of the features comprises a physiological factor.

556. The carrier medium of claim 555, wherein at least one of the heart reference features comprises a physiological factor.

557. The carrier medium of claim 555, wherein at least one of the heart reference features comprises an image.

558. The carrier medium of claim 555, wherein at least one of the heart reference features comprises at least a portion of an image.

559. The carrier medium of claim 555, wherein at least one of the heart reference features comprises a numerical feature.

560. The carrier medium of claim 555, wherein at least one of the heart reference features comprises a numerical feature derived at least in part from at least a portion of an image.

561. The carrier medium of claim 555, wherein the program instructions are further executable to implement a method comprising:

calculating at least one feature from at least one image of the heart tissue.

562. The carrier medium of claim 555, wherein the database comprises data from one or more expert opinions.

563. The carrier medium of claim 555, wherein the database comprises clinical data.

564. The carrier medium of claim 563, wherein the clinical data comprises data derived from one or more surgical procedures.

565. The carrier medium of claim 555, wherein at least one of the computer programs divides at least one image of human heart tissue into a plurality of sections.

566. The carrier medium of claim 555, wherein the program instructions are further executable to implement a method comprising:

extrapolating at least one feature from at least one image of the heart tissue.

567. The carrier medium of claim 555, wherein the program instructions are further executable to implement a method comprising:

using at least one image of human heart tissue to create at least a portion of an image of the heart tissue which appears three-dimensional.

568. The carrier medium of claim 555, wherein the program instructions are further executable to implement a method comprising:

using a plurality of images to create at least a portion of an image of the heart tissue which appears four-dimensional.

569. The carrier medium of claim 568, wherein one of the dimensions comprises time.

570. The carrier medium of claim 568, wherein at least one of the dimensions comprises at least one physiological factor.

571. The carrier medium of claim 570, wherein at least one physiological factor comprises hormone B-type natriuretic peptide.

572. The carrier medium of claim 555, wherein the program instructions are further executable to implement a method comprising:

creating one or more images of the assessed state of the heart.

573. The carrier medium of claim 572, wherein at least one image comprises at least a portion which appears three-dimensional.

574. The carrier medium of claim 572, wherein at least one image comprises progressive coloring.

575. The carrier medium of claim 574, wherein the progressive coloring comprises grayscale.

576. The carrier medium of claim 555, wherein the program instructions are further executable to implement:

assessing a volume of at least a portion of the heart tissue.

577. The carrier medium of claim 555, wherein the program instructions are further executable to implement:

comparing a contrast between two or more sections in at least one image; and

assessing a viability of the heart tissue.

578. The carrier medium of claim 555, wherein the program instructions are further executable to implement:

evaluating motion of at least one portion of at least one feature of one or more images of heart tissue; and

assessing asynergy of the heart tissue.

579. The carrier medium of claim 555, wherein the program instructions are further executable to implement:

evaluating a curvature of at least a section of a portion of a heart comprising the heart tissue; and

assessing a shape of at least the portion of the heart.

580. The carrier medium of claim 555, wherein the program instructions are further executable to implement:

assigning at least one reference point to at least two images of the heart tissue;

evaluating a relative movement of at least one of the reference points between at least two images of the heart tissue; and

assessing a viability of the heart tissue.

581. The carrier medium of claim 555, wherein the program instructions are further executable to implement:

determining at least a first and second volume of a portion of the heart tissue and blood flow through a portion of the heart; and

assessing a mitral regurgitation with a provided velocity of a fluid through at least a portion of the aorta.

582. A method of assessing treatments for a human heart, comprising:

providing at least one image of human heart tissue from the heart to a computer system, wherein the image comprises a plurality of structural elements;

performing a first modification of at least one of the plurality of structural elements;

performing at least a second modification of at least one of the plurality of structural elements, wherein the second modification is performed independent of the first modification; and

comparing at least one effect of the first modification to at least one effect of the second modification, or comparing at least one effect of the second modification to at least one effect of the first modification.

583. The method of claim 582, wherein comparing the first and at least second modifications of at least one structural element comprises using the computer system to compare the first and at least second modifications of at least one structural element.

584. The method of claim 582, wherein at least one of the structural elements comprises a physiological factor.

585. The method of claim 582, wherein comparing the first and at least second modifications of at least one structural element comprises using the computer system to compare the first and at least second modifications of at least one structural element to a database.

586. The method of claim 585, wherein the computer system divides at least one image into a plurality of sections.

587. The method of claim 585, wherein the database comprises clinical data.

588. The method of claim 587, wherein the clinical data comprises data derived from one or more surgical procedures.

589. The method of claim 582, wherein at least one of the structural elements comprises an image.

590. The method of claim 582, wherein at least one of the structural elements comprises at least a portion of an image.

591. The method of claim 582, wherein at least one of the structural elements comprises a numerical feature.

592. The method of claim 582, wherein at least one of the structural elements comprises a numerical feature derived at least in part from at least a portion of an image.

593. The method of claim 582, further comprising extrapolating at least a portion of at least one structural element from at least one image of human heart tissue provided to the computer system.

594. The method of claim 582, further comprising calculating at least a portion of at least one structural element from at least one image of human heart tissue provided to the computer system.

595. The method of claim 582, further comprising:

providing at least two images to the computer system; and

using at least two images to create at least a second image of human heart tissue, wherein at least a portion of the second image appears at least three-dimensional.

596. The method of claim 582, further comprising:

providing a plurality of images to the computer system; and

using at least some of the plurality of images to create at least a second image of human heart tissue, wherein at least a portion of the second image appears at least four-dimensional.

597. The method of claim 596, wherein one of the dimensions comprises time.

598. The method of claim 596, wherein at least one of the dimensions comprises at least one physiological factor.

599. The method of claim 598, wherein at least one physiological factor comprises hormone B-type natriuretic peptide.

600. The method of claim 582, further comprising creating at least one image of the assessed condition of the heart.

601. The method of claim 600, wherein at least one image of the assessed condition comprises at least a portion appearing three-dimensional.

602. The method of claim 600, wherein at least one image of the assessed condition of the heart comprises color gradients.

603. A method of assessing treatments for a human heart, comprising:

providing a plurality of images of heart tissue from a human heart to a computer system;

using the images to create at least a second image of the heart tissue, wherein the image comprises a plurality of structural elements, and wherein at least a portion of the second image appears at least three-dimensional;

performing a first modification of at least one of the plurality of structural elements;

performing at least a second modification of at least one of the plurality of structural elements, wherein the second modification is performed independent of the first modification; and

comparing at least one effect of the first modification to at least one effect of the second modification, or comparing at least one effect of the second modification to at least one effect of the first modification.

604. The method of claim 603, further comprising assessing the comparison of the first modification and at least one second modifications of at least one structural element.

605. The method of claim 603, wherein the first modification comprises a plurality of successive modifications of at least one of the plurality of structural elements.

606. The method of claim 603, wherein at least one of the structural elements comprises a physiological factor.

607. The method of claim 603, further comprising assessing the comparison of the first modification and at least one second modification, wherein the assessment comprises determining an optimum modification from the first and at least one second modification.

608. The method of claim 603, wherein the computer system divides at least one image into a plurality of sections.

609. The method of claim 603, wherein at least one of the structural elements comprises an image.

610. The method of claim 603, wherein at least one of the structural elements comprises at least a portion of an image.

611. The method of claim 603, wherein at least one of the structural elements comprises a numerical feature.

612. The method of claim 603, wherein at least one of the structural elements comprises a numerical feature derived at least in part from at least a portion of an image.

613. The method of claim 603, further comprising extrapolating at least a portion of at least one structural element from the plurality of images of human heart tissue provided to the computer system.

614. The method of claim 603, further comprising using the computer system to extrapolate at least a portion of at least one structural element from the plurality of images of human heart tissue provided to the computer system.

615. The method of claim 603, further comprising using the images to create at least a second image of human heart tissue, wherein at least a portion of the second image appears at least four-dimensional.

616. The method of claim 615, wherein one of the dimensions comprises time.

617. The method of claim 615, wherein at least one of the dimensions comprises at least one physiological factor.

618. The method of claim 617, wherein at least one physiological factor comprises hormone B-type natriuretic peptide.

619. The method of claim 603, further comprising creating at least one image of the comparison of the first modification and at least one second modification of at least one structural element.

620. The method of claim 619, wherein at least one image of the comparison of the first modification and at least one second modification comprises at least a portion appearing three-dimensional.

621. The method of claim 619, wherein at least one image of the comparison of the first and at least second modifications of at least one structural element comprises color gradients.

622. A method of assessing treatments for a human heart, comprising:

providing at least one image of human heart tissue from the heart to a computer system, wherein the image comprises a plurality of structural elements;

performing a modification of at least one of the plurality of structural elements; and

comparing the modification to one or more reference modifications in a database to assess at least one effect of the modification.

623. The method of claim 622, wherein comparing the modification and at least one reference modification comprises using the computer system to compare the modification and at least one reference modification.

624. The method of claim 623, wherein the computer system divides at least one image into a plurality of sections.

625. The method of claim 622, wherein at least one of the structural elements comprises a physiological factor.

626. The method of claim 622, wherein the database comprises clinical data.

627. The method of claim 626, wherein the clinical data comprises data derived from one or more surgical procedures.

628. The method of claim 622, wherein at least one of the structural elements comprises an image.

629. The method of claim 622, wherein at least one of the structural elements comprises at least a portion of an image.

630. The method of claim 622, wherein at least one of the structural elements comprises a numerical feature.

631. The method of claim 622, wherein at least one of the structural elements comprises a numerical feature derived at least in part from at least a portion of an image.

632. The method of claim 622, further comprising extrapolating at least a portion of at least one structural element from at least one image of human heart tissue provided to the computer system.

633. The method of claim 622, further comprising:

providing at least two images to the computer system; and

using at least two images to create at least a second image of human heart tissue, wherein at least a portion of the second image appears at least three-dimensional.

634. The method of claim 622, further comprising:

providing a plurality of images to the computer system; and

using at least some of the plurality of images to create at least a second image of human heart tissue, wherein at least a portion of the second image appears at least four-dimensional.

635. The method of claim 634, wherein one of the dimensions comprises time.

636. The method of claim 634, wherein at least one of the dimensions comprises at least one physiological factor.

637. The method of claim 636, wherein at least one physiological factor comprises hormone B-type natriuretic peptide.

638. The method of claim 622, further comprising creating at least one image of the assessed effect of the modification.

639. The method of claim 638, wherein at least one image of the assessed effect comprises at least a portion appearing three-dimensional.

640. The method of claim 638, wherein at least one image of the assessed effect of the heart comprises color gradients.

641. A method of designing cardiac instruments, comprising:

providing at least one image of heart tissue from a human heart to a computer system; and

creating at least a portion of at least one patient-specific cardiac instrument or implant using at least one of the images, or at least one of the images that has been modified.

642. The method of claim 641, further comprising making at least a portion of at least one of the patient-specific cardiac instruments or implants.

643. The method of claim 641, wherein the image comprises a plurality of structural elements, and wherein at least one of the structural elements comprises a physiological factor.

644. The method of claim 641, wherein at least one of the implants comprises a patch.

645. The method of claim 641, wherein at least one of the implants comprises an annuloplasty ring.

646. The method of claim 641, wherein at least one of the implants comprises a suture.

647. The method of claim 641, wherein at least one of the implants comprises a valve.

648. The method of claim 641, wherein at least one of the instruments comprises a shaper.

649. The method of claim 648, wherein the shaper is configurable to expand to a predetermined shape and size.

650. The method of claim 648, wherein the shaper is configurable to expand to a predetermined shape and size substantially similar to the size and shape of an appropriate left ventricle.

651. The method of claim 648, wherein the shaper comprises a balloon.

652. The method of claim 641, wherein at least one of the instruments comprises a guide.

653. The method of claim 652, wherein the guide comprises an overlay.

654. The method of claim 652, wherein the guide comprises an overlay, and wherein the overlay comprises indicia configurable to assist a surgical procedure during use.

655. The method of claim 641, wherein creating at least a portion of at least one patient-specific cardiac instrument or implant comprises creating a pattern of at least a portion of at least one of the instruments or implants.

656. The method of claim 655, wherein creating the pattern comprises using the computer system to create the pattern.

657. The method of claim 641, wherein the computer system divides at least one image into a plurality of sections.

658. The method of claim 641, further comprising using the computer system to calculate at least one structural element from at least one image of human heart tissue provided to the computer system.

659. The method of claim 641, further comprising using the computer system to extrapolate at least a portion of at least one structural element from at least one image of human heart tissue provided to the computer system.

660. The method of claim 659, wherein at least one of the structural elements comprises an image.

661. The method of claim 659, wherein at least one of the structural elements comprises at least a portion of an image.

662. The method of claim 659, wherein at least one of the structural elements comprises a numerical feature.

663. The method of claim 659, wherein at least one of the structural elements comprises a numerical feature derived at least in part from at least a portion of an image.

664. The method of claim 641, further comprising:

providing at least two images of human heart tissue to the computer system; and

using the images to create at least a second image of the heart tissue wherein a portion of the second image appears three-dimensional.

665. The method of claim 641, further comprising:

providing a plurality of images of human heart tissue to the computer system; and

using at least some of the plurality of images to create at least a second image of the heart tissue, wherein a portion of the second image appears four-dimensional.

666. The method of claim 665, wherein one of the dimensions comprises time.

667. The method of claim 665, wherein at least one of the dimensions comprises at least one physiological factor.

668. The method of claim 667, wherein at least one physiological factor comprises hormone B-type natriuretic peptide.

669. The method of claim 641, further comprising creating at least one image of a pattern of at least a portion of at least one cardiac instrument using at least one image.

670. The method of claim 669, wherein at least one image of the pattern comprises at least a portion appearing three-dimensional.

671. The method of claim 669, wherein at least a portion of at least one structural element of the pattern is calculated from at least one image.

672. The method of claim 669, wherein creating the pattern comprises using the computer system to create the pattern.

673. The method of claim 669, wherein at least a portion of at least one structural element of the pattern is extrapolated from at least one image.

674. The method of claim 673, wherein at least one of the structural elements comprises an image.

675. The method of claim 673, wherein at least one of the structural elements comprises at least a portion of an image.

676. The method of claim 673, wherein at least one of the structural elements comprises a numerical feature.

677. The method of claim 673, wherein at least one of the structural elements comprises a numerical feature derived at least in part from at least a portion of an image.

678. A method of designing cardiac instruments, comprising:

providing a plurality of images of heart tissue from a human heart to a computer system;

using the plurality of images to create one or more second images of the heart tissue, wherein at least a portion of one of the second images appears at least three-dimensional; and

creating at least a portion of at least one patient-specific cardiac instrument or implant using at least one of the second images, or at least one of the second images that has been modified.

679. The method of claim 678, further comprising making at least a portion of at least one of the patient-specific cardiac instruments or implants.

680. The method of claim 678, wherein at least one of the dimensions of at least one of the second images comprises a physiological factor.

681. The method of claim 678, wherein at least one of the implants comprises a patch.

682. The method of claim 678, wherein at least one of the implants comprises an annuloplasty ring.

683. The method of claim 678, wherein at least one of the implants comprises a suture.

684. The method of claim 678, wherein at least one of the implants comprises a valve.

685. The method of claim 678, wherein at least one of the instruments comprises a shaper.

686. The method of claim 685, wherein the shaper is configurable to expand to a predetermined shape and size.

687. The method of claim 685, wherein the shaper is configurable to expand to a predetermined shape and size substantially similar to the size and shape of an appropriate left ventricle.

688. The method of claim 685, wherein the shaper comprises a balloon.

689. The method of claim 678, wherein at least one of the instruments comprises a guide.

690. The method of claim 689, wherein the guide comprises an overlay.

691. The method of claim 689, wherein the guide comprises an overlay, wherein the overlay comprises indicia configurable to assist a surgical procedure during use.

692. The method of claim 678, wherein creating at least a portion of at least one patient-specific cardiac instrument or implant comprises creating a pattern of at least a portion of at least one of the instruments or implants.

693. The method of claim 692, wherein creating the pattern comprises using the computer system to create the pattern.

694. The method of claim 692, wherein creating the pattern comprises using the computer system to create the pattern.

695. The method of claim 678, wherein using the images to create at least a second image of human heart tissue comprises using the computer system to create the second image.

696. The method of claim 678, wherein the computer system divides at least one image into a plurality of sections.

697. The method of claim 678, further comprising extrapolating at least a portion of at least one structural element from the plurality of images of human heart tissue provided to the computer system.

698. The method of claim 697, wherein at least one of the structural elements comprises an image.

699. The method of claim 697, wherein at least one of the structural elements comprises at least a portion of an image.

700. The method of claim 697, wherein at least one of the structural elements comprises a numerical feature.

701. The method of claim 697, wherein at least one of the structural elements comprises a numerical feature derived at least in part from at least a portion of an image.

702. The method of claim 678, further comprising using the computer system to calculate at least a portion of at least one structural element from the plurality of images of human heart tissue provided to the computer system.

703. The method of claim 678, further comprising using the plurality of images to create at least a third image of the heart tissue comprising at least a portion appearing at least four-dimensional.

704. The method of claim 703, wherein one of the dimensions comprises time.

705. The method of claim 703, wherein at least one of the dimensions comprises at least one physiological factor.

706. The method of claim 705, wherein at least one physiological factor comprises hormone B-type natriuretic peptide.

707. The method of claim 678, further comprising creating at least one image of a pattern of at least a portion of at least one cardiac instrument.

708. The method of claim 707, wherein at least one image of the pattern of the modification comprises a portion appearing at least three-dimensional.

709. A system configured to assess treatments for disease of a human heart, comprising:

a CPU; and

a system memory coupled to the CPU, wherein the system memory stores one or more computer programs executable by the CPU;

wherein one or more computer programs are executable to:

perform a first modification of at least one feature of one or more images of heart tissue;

perform at least one second modification of at least one of the features, wherein the second modification is performed independent of the first modification; and

compare at least one effect of the first modification to at least one effect of the second modification, or compare at least one effect of the second modification to at least one effect of the first modification.

710. A carrier medium configured to store program instructions, wherein the program instructions are executable to implement a method to assess treatments for a human heart, comprising:

performing a first modification of at least one feature of one or more images of heart tissue;

performing at least one second modification of at least one of the features, wherein the second modification is performed independent of the first modification; and

comparing at least one effect of the first modification to at least one effect of the second modification, or comparing at least one effect of the second modification to at least one effect of the first modification.

711. The system of claim 709, wherein the first and at least second modifications of at least one feature are compared automatically by at least one of the computer programs based on at least some user input.

712. The system of claim 709, wherein at least one of the features comprises an image.

713. The system of claim 709, wherein at least one of the features comprises at least a portion of an image.

714. The system of claim 709, wherein at least one of the features comprises a numerical feature.

715. The system of claim 709, wherein at least one of the features comprises a numerical feature derived at least in part from at least a portion of an image.

716. The system of claim 709, wherein the first and at least second modifications of at least one feature are compared automatically by at least one of the computer programs by comparing the first and at least second modifications of at least one feature to a database.

717. The system of claim 585, wherein the database comprises data derived from expert opinion.

718. The system of claim 585, wherein one or more computer programs are further executable to divide at least one image into a plurality of sections.

719. The system of claim 585, wherein the database comprises clinical data.

720. The system of claim 719, wherein the clinical data comprises data derived from previous surgical procedures.

721. The system of claim 709, wherein one or more computer programs are further executable to extrapolate at least one portion of at least one feature from at least two images of human heart tissue.

722. The system of claim 709, wherein one or more computer programs are further executable to:

use at least two images of human heart tissue to create at least a second image of human heart tissue, wherein at least a portion of the second image appears at least three-dimensional.

723. The system of claim 709, wherein one or more computer programs are further executable to:

use at least some of a plurality of images of human heart tissue to create at least a second image of human heart tissue, wherein at least a portion of the second image appears at least four-dimensional.

724. The system of claim 596, wherein one of the dimensions comprises time.

725. The system of claim 596, wherein at least one of the dimensions comprises at least one physiological factor.

726. The system of claim 598, wherein at least one physiological factor comprises hormone B-type natriuretic peptide.

727. The system of claim 709, wherein one or more computer programs are further executable to create at least one image of the assessed condition of the heart.

728. The system of claim 600, wherein at least one image of the assessed condition comprises at least a portion appearing three-dimensional.

729. The system of claim 600, wherein at least one image of the assessed condition of the heart comprises progressive coloring.

730. The system of claim 602, wherein progressive coloring comprises grayscale.

731. The system of claim 709, wherein at least one of the computer programs is further executable to assess a volume of at least a portion of the heart tissue.

732. The system of claim 709, wherein at least one of the computer programs is further executable to:

compare a contrast between two or more sections in at least one image; and

assess a viability of the heart tissue.

733. The system of claim 709, wherein at least one of the computer programs is further executable to:

evaluate motion of at least one portion of at least one feature of one or more images of heart tissue; and

assess asynergy of the heart tissue.

734. The system of claim 709, wherein at least one of the computer programs is further executable to:

evaluate a curvature of at least a section of a portion of a heart comprising the heart tissue; and

assess a shape of at least the portion of the heart.

735. The system of claim 709, wherein at least one of the computer programs is further executable to:

assign at least one reference point to at least two images of the heart tissue;

evaluate a relative movement of at least one of the reference points between at least two images of the heart tissue; and

assess a viability of the heart tissue.

736. The system of claim 709, wherein at least one of the computer programs is further executable to:

determine at least a first and second volume of a portion of the heart tissue and blood flow through a portion of the heart; and

assess a mitral regurgitation with a provided velocity of a fluid through at least a portion of the aorta.

737. The carrier medium of claim 710, wherein the first and at least second modifications of at least one feature are compared automatically by at least by at least some of the program instructions based on at least some user input.

738. The carrier medium of claim 710, wherein at least one of the features comprises an image.

739. The carrier medium of claim 710, wherein at least one of the features comprises at least a portion of an image.

740. The carrier medium of claim 710, wherein at least one of the features comprises a numerical feature.

741. The carrier medium of claim 710, wherein at least one of the features comprises a numerical feature derived at least in part from at least a portion of an image.

742. The carrier medium of claim 710, wherein the first and at least second modifications of at least one feature are compared automatically by at least some of the program instructions by comparing the first and at least second modifications of at least one feature to a database.

743. The carrier medium of claim 742, wherein the database comprises data derived from expert opinion.

744. The carrier medium of claim 742, wherein the program instructions are further executable to divide at least one image into a plurality of sections.

745. The carrier medium of claim 742, wherein the database comprises clinical data.

746. The carrier medium of claim 745, wherein the clinical data comprises data derived from previous surgical procedures.

747. The carrier medium of claim 710, wherein the program instructions are further executable to implement a method comprising:

extrapolating at least one portion of at least one feature from at least two images of human heart tissue.

748. The carrier medium of claim 710, wherein the program instructions are further executable to implement a method comprising:

using at least two images of human heart tissue to create at least a second image of human heart tissue, wherein at least a portion of the second image appears at least three-dimensional.

749. The carrier medium of claim 710, wherein the program instructions are further executable to implement a method comprising:

using at least some of a plurality of images of human heart tissue to create at least a second image of human heart tissue, wherein at least a portion of the second image appears at least four-dimensional.

750. The carrier medium of claim 749, wherein one of the dimensions comprises time.

751. The carrier medium of claim 749, wherein at least one of the dimensions comprises at least one physiological factor.

752. The carrier medium of claim 751, wherein at least one physiological factor comprises hormone B-type natriuretic peptide.

753. The carrier medium of claim 710, wherein the program instructions are further executable to implement a method comprising:

creating at least one image of the assessed condition of the heart.

754. The carrier medium of claim 753, wherein at least one image of the assessed condition comprises at least a portion appearing three-dimensional.

755. The carrier medium of claim 753, wherein at least one image of the assessed condition of the heart comprises progressive coloring.

756. The carrier medium of claim 755, wherein progressive coloring comprises grayscale.

757. The carrier medium of claim 710, wherein the program instructions are further executable to implement:

assessing a volume of at least a portion of the heart tissue.

758. The carrier medium of claim 710, wherein the program instructions are further executable to implement:

comparing a contrast between two or more sections in at least one image; and

assessing a viability of the heart tissue.

759. The carrier medium of claim 710, wherein the program instructions are further executable to implement:

evaluating motion of at least one portion of at least one feature of one or more images of heart tissue; and

assessing asynergy of the heart tissue.

760. The carrier medium of claim 710, wherein the program instructions are further executable to implement:

evaluating a curvature of at least a section of a portion of a heart comprising the heart tissue; and

assessing a shape of at least the portion of the heart.

761. The carrier medium of claim 710, wherein the program instructions are further executable to implement:

assigning at least one reference point to at least two images of the heart tissue;

evaluating a relative movement of at least one of the reference points between at least two images of the heart tissue; and

assessing a viability of the heart tissue.

762. The carrier medium of claim 710, wherein the program instructions are further executable to implement:

determining at least a first and second volume of a portion of the heart tissue and blood flow through a portion of the heart; and

assessing a mitral regurgitation with a provided velocity of a fluid through at least a portion of the aorta.

763. A system configured to assess treatments for disease of a human heart, comprising:

a CPU; and

a system memory coupled to the CPU, wherein the system memory stores one or more computer programs executable by the CPU;

wherein one or more computer programs are executable to:

perform a modification of at least one feature of one or more images of heart tissue;

compare the modification to at least one reference modification in a database to assess an effect of the modification.

764. The system of claim 763, wherein the modification of at least one feature are compared automatically to a reference modification by at least one of the computer programs based on at least some user input.

765. The system of claim 764, wherein one or more computer programs are further executable to divide at least one image into a plurality of sections.

766. The system of claim 763, wherein at least one of the features comprises an image.

767. The system of claim 763, wherein at least one of the features comprises at least a portion of an image.

768. The system of claim 763, wherein at least one of the features comprises a numerical feature.

769. The system of claim 763, wherein at least one of the features comprises a numerical feature derived at least in part from at least a portion of an image.

770. The system of claim 763, wherein the database comprises data derived from expert opinion.

771. The system of claim 763, wherein the database comprises clinical data.

772. The system of claim 771, wherein the clinical data comprises data derived from previous surgical procedures.

773. The system of claim 763, wherein one or more computer programs are further executable to extrapolate at least one portion of at least one feature from at least two images of human heart tissue.

774. The system of claim 763, wherein one or more computer programs are further executable to:

use at least two images of human heart tissue to create at least a second image of human heart tissue, wherein at least a portion of the second image appears at least three-dimensional.

775. The system of claim 763, wherein one or more computer programs are further executable to:

use at least some of a plurality of images of human heart tissue to create at least a second image of human heart tissue, wherein at least a portion of the second image appears at least four-dimensional.

776. The system of claim 775, wherein one of the dimensions comprises time.

777. The system of claim 775, wherein at least one of the dimensions comprises at least one physiological factor.

778. The system of claim 777, wherein at least one physiological factor comprises hormone B-type natriuretic peptide.

779. The system of claim 763, wherein one or more computer programs are further executable to create at least one image of the assessed condition of the heart.

780. The system of claim 779, wherein at least one image of the assessed condition comprises at least a portion appearing three-dimensional.

781. The system of claim 779, wherein at least one image of the assessed condition of the heart comprises progressive coloring.

782. The system of claim 781, wherein progressive coloring comprises grayscale.

783. The system of claim 763, wherein at least one of the computer programs is further executable to assess a volume of at least a portion of the heart tissue.

784. The system of claim 763, wherein at least one of the computer programs is further executable to:

compare a contrast between two or more sections in at least one image; and

assess a viability of the heart tissue.

785. The system of claim 763, wherein at least one of the computer programs is further executable to:

evaluate motion of at least one portion of at least one feature of one or more images of heart tissue; and

assess asynergy of the heart tissue.

786. The system of claim 763, wherein at least one of the computer programs is further executable to:

evaluate a curvature of at least a section of a portion of a heart comprising the heart tissue; and

assess a shape of at least the portion of the heart.

787. The system of claim 763, wherein at least one of the computer programs is further executable to:

assign at least one reference point to at least two images of the heart tissue;

evaluate a relative movement of at least one of the reference points between at least two images of the heart tissue; and

assess a viability of the heart tissue.

788. The system of claim 763, wherein at least one of the computer programs is further executable to:

determine at least a first and second volume of a portion of the heart tissue and blood flow through a portion of the heart; and

assess a mitral regurgitation with a provided velocity of a fluid through at least a portion of the aorta.

789. A carrier medium configured to store program instructions, wherein the program instructions are executable to implement a method to assess treatments for a human heart, comprising:

performing a modification of at least one feature of one or more images of heart tissue; and

comparing the modification to one or more reference modifications in a database to assess at least one effect of the modification.

790. The carrier medium of claim 789, wherein the modification of at least one feature is compared automatically to a reference modification by the program instructions based on at least some user input.

791. The carrier medium of claim 790, wherein the program instructions are further executable to divide at least one image into a plurality of sections.

792. The carrier medium of claim 789, wherein at least one of the features comprises an image.

793. The carrier medium of claim 789, wherein at least one of the features comprises at least a portion of an image.

794. The carrier medium of claim 789, wherein at least one of the features comprises a numerical feature.

795. The carrier medium of claim 789, wherein at least one of the features comprises a numerical feature derived at least in part from at least a portion of an image.

796. The carrier medium of claim 789, wherein the database comprises data derived from expert opinion.

797. The carrier medium of claim 789, wherein the database comprises clinical data.

798. The carrier medium of claim 797, wherein the clinical data comprises data derived from previous surgical procedures.

799. The carrier medium of claim 789, wherein the program instructions are further executable to implement a method comprising:

extrapolating at least one portion of at least one feature from at least two images of human heart tissue.

800. The carrier medium of claim 789, wherein the program instructions are further executable to implement a method comprising:

using at least two images of human heart tissue to create at least a second image of human heart tissue, wherein at least a portion of the second image appears at least three-dimensional.

801. The carrier medium of claim 789, wherein the program instructions are further executable to implement a method comprising:

using at least some of a plurality of images of human heart tissue to create at least a second image of human heart tissue, wherein at least a portion of the second image appears at least four-dimensional.

802. The carrier medium of claim 801, wherein one of the dimensions comprises time.

803. The carrier medium of claim 801, wherein at least one of the dimensions comprises at least one physiological factor.

804. The carrier medium of claim 803, wherein at least one physiological factor comprises hormone B-type natriuretic peptide.

805. The carrier medium of claim 789, wherein the program instructions are further executable to implement a method comprising:

creating at least one image of the assessed condition of the heart.

806. The carrier medium of claim 805, wherein at least one image of the assessed condition comprises at least a portion appearing three-dimensional.

807. The carrier medium of claim 805, wherein at least one image of the assessed condition of the heart comprises progressive coloring.

808. The carrier medium of claim 807, wherein progressive coloring comprises grayscale.

809. The carrier medium of claim 789, wherein the program instructions are further executable to implement:

assessing a volume of at least a portion of the heart tissue.

810. The carrier medium of claim 789, wherein the program instructions are further executable to implement:

comparing a contrast between two or more sections in at least one image; and

assessing a viability of the heart tissue.

811. The carrier medium of claim 789, wherein the program instructions are further executable to implement:

evaluating motion of at least one portion of at least one feature of one or more images of heart tissue; and

assessing asynergy of the heart tissue.

812. The carrier medium of claim 789, wherein the program instructions are further executable to implement:

evaluating a curvature of at least a section of a portion of a heart comprising the heart tissue; and

assessing a shape of at least the portion of the heart.

813. The carrier medium of claim 789, wherein the program instructions are further executable to implement:

assigning at least one reference point to at least two images of the heart tissue;

evaluating a relative movement of at least one of the reference points between at least two images of the heart tissue; and

assessing a viability of the heart tissue.

814. The carrier medium of claim 789, wherein the program instructions are further executable to implement:

determining at least a first and second volume of a portion of the heart tissue and blood flow through a portion of the heart; and

assessing a mitral regurgitation with a provided velocity of a fluid through at least a portion of the aorta.

815. A system configured to design cardiac instruments, comprising:

a CPU; and

a system memory coupled to the CPU, wherein the system memory stores one or more computer programs executable by the CPU;

wherein one or more computer programs are executable to create a pattern of at least a portion of at least one patient-specific cardiac instrument or implant using at least one image of heart tissue from a human heart.

816. A carrier medium configured to store program instructions, wherein the program instructions are executable to implement a method to design cardiac instruments, comprising:

creating a pattern of at least a portion of at least one patient-specific cardiac instrument or implant using at least one image of heart tissue from a human heart.

817. The system of claim 815, wherein the pattern is created automatically by at least one of the computer programs based on at least some user input.

818. The system of claim 817, wherein one or more computer programs are further executable to divide at least one image into a plurality of sections.

819. The system of claim 815, wherein the image comprises a plurality of features, and wherein at least one of the features comprises a physiological factor.

820. The system of claim 815, wherein at least one of the implants comprises a reinforcing device.

821. The system of claim 820, wherein the reinforcing device comprises a patch.

822. The system of claim 815, wherein at least one of the implants comprises an annuloplasty ring.

823. The system of claim 815, wherein at least one of the implants comprises a suture.

824. The system of claim 815, wherein at least one of the implants comprises a valve.

825. The system of claim 815, wherein at least one of the instruments comprises a shaper.

826. The system of claim 648, wherein the shaper is configurable to expand to a predetermined shape and size.

827. The system of claim 648, wherein the shaper is configurable to expand to a predetermined shape and size substantially similar to the size and shape of an appropriate left ventricle.

828. The system of claim 648, wherein the shaper comprises a balloon.

829. The system of claim 815, wherein at least one of the instruments comprises a guide.

830. The system of claim 652, wherein the guide comprises an overlay.

831. The system of claim 652, wherein the guide comprises an overlay, and wherein the overlay comprises indicia configurable to assist a surgical procedure during use.

832. The system of claim 815, wherein one or more computer programs are further executable to extrapolate at least a portion of at least one feature from at least one image of human heart tissue.

833. The system of claim 832, wherein at least one of the features comprises an image.

834. The system of claim 832, wherein at least one of the features comprises at least a portion of an image.

835. The system of claim 832, wherein at least one of the features comprises a numerical feature.

836. The system of claim 815, wherein one or more computer programs are further executable to:

use at least two images of human heart tissue to create at least a second image of the heart tissue, wherein at least a portion of the second image appears three-dimensional.

837. The system of claim 815, wherein one or more computer programs are further executable to:

use a plurality of image to create at least a second image of the heart tissue, wherein at least a portion of the second image appears four-dimensional.

838. The system of claim 665, wherein one of the dimensions comprises time.

839. The system of claim 665, wherein at least one of the dimensions comprises at least one physiological factor.

840. The system of claim 667, wherein at least one physiological factor comprises hormone B-type natriuretic peptide.

841. The system of claim 815, wherein one or more computer programs are further executable to create at least one image of the pattern of at least a portion of at least one cardiac instrument using at least one image.

842. The system of claim 669, wherein at least one portion of at least one image of the pattern appears at least three-dimensional.

843. The system of claim 815, wherein one or more computer programs are further executable to extrapolate at least one portion of at least one feature of the pattern from at least two images.

844. The system of claim 843, wherein at least one of the features comprises an image.

845. The system of claim 843, wherein at least one of the features comprises at least a portion of an image.

846. The system of claim 843, wherein at least one of the features comprises a numerical feature.

847. The system of claim 815, wherein at least one of the computer programs is further executable to assess a volume of at least a portion of the heart tissue.

848. The system of claim 815, wherein at least one of the computer programs is further executable to:

compare a contrast between two or more sections in at least one image; and

assess a viability of the heart tissue.

849. The system of claim 815, wherein at least one of the computer programs is further executable to:

evaluate motion of at least one portion of at least one feature of one or more images of heart tissue; and

assess asynergy of the heart tissue.

850. The system of claim 815, wherein at least one of the computer programs is further executable to:

evaluate a curvature of at least a section of a portion of a heart comprising the heart tissue; and

assess a shape of at least the portion of the heart.

851. The system of claim 815, wherein at least one of the computer programs is further executable to:

assign at least one reference point to at least two images of the heart tissue;

evaluate a relative movement of at least one of the reference points between at least two images of the heart tissue; and

assess a viability of the heart tissue.

852. The system of claim 815, wherein at least one of the computer programs is further executable to:

determine at least a first and second volume of a portion of the heart tissue and blood flow through a portion of the heart; and

assess a mitral regurgitation with a provided velocity of a fluid through at least a portion of the aorta.

853. The carrier medium of claim 816, wherein the pattern is created automatically by at least some of the program instructions based on at least some user input.

854. The carrier medium of claim 853, wherein the program instructions are further executable to implement a method comprising dividing at least one image into a plurality of sections.

855. The carrier medium of claim 816, wherein the image comprises a plurality of features, and wherein at least one of the features comprises a physiological factor.

856. The carrier medium of claim 816, wherein at least one of the implants comprises a reinforcing device.

857. The carrier medium of claim 856, wherein the reinforcing device comprises a patch.

858. The carrier medium of claim 816, wherein at least one of the implants comprises an annuloplasty ring.

859. The carrier medium of claim 816, wherein at least one of the implants comprises a suture.

860. The carrier medium of claim 816, wherein at least one of the implants comprises a valve.

861. The carrier medium of claim 816, wherein at least one of the instruments comprises a shaper.

862. The carrier medium of claim 861, wherein the shaper is configurable to expand to a predetermined shape and size.

863. The carrier medium of claim 861, wherein the shaper is configurable to expand to a predetermined shape and size substantially similar to the size and shape of an appropriate left ventricle.

864. The carrier medium of claim 861, wherein the shaper comprises a balloon.

865. The carrier medium of claim 816, wherein at least one of the instruments comprises a guide.

866. The carrier medium of claim 865, wherein the guide comprises an overlay.

867. The carrier medium of claim 865, wherein the guide comprises an overlay, and wherein the overlay comprises indicia configurable to assist a surgical procedure during use.

868. The carrier medium of claim 816, wherein the program instructions are further executable to implement a method comprising:

extrapolating at least a portion of at least one feature from at least one image of human heart tissue.

869. The carrier medium of claim 868, wherein at least one of the features comprises an image.

870. The carrier medium of claim 868, wherein at least one of the features comprises at least a portion of an image.

871. The carrier medium of claim 868, wherein at least one of the features comprises a numerical feature.

872. The carrier medium of claim 816, wherein the program instructions are further executable to implement a method comprising:

using at least two images of human heart tissue to create at least a second image of the heart tissue, wherein at least a portion of the second image appears three-dimensional.

873. The carrier medium of claim 816, wherein the program instructions are further executable to implement a method comprising:

using a plurality of image to create at least a second image of the heart tissue, wherein at least a portion of the second image appears four-dimensional.

874. The carrier medium of claim 873, wherein one of the dimensions comprises time.

875. The carrier medium of claim 873, wherein at least one of the dimensions comprises at least one physiological factor.

876. The carrier medium of claim 875, wherein at least one physiological factor comprises hormone B-type natriuretic peptide.

877. The carrier medium of claim 816, wherein the program instructions are further executable to implement a method comprising:

creating at least one image of the pattern of at least a portion of at least one cardiac instrument using at least one image.

878. The carrier medium of claim 877, wherein at least one portion of at least one image of the pattern appears at least three-dimensional.

879. The carrier medium of claim 816, wherein the program instructions are further executable to implement a method comprising extrapolating at least one portion of at least one feature of the pattern from at least two images.

880. The carrier medium of claim 879, wherein at least one of the features comprises an image.

881. The carrier medium of claim 879, wherein at least one of the features comprises at least a portion of an image.

882. The carrier medium of claim 879, wherein at least one of the features comprises a numerical feature.

883. The carrier medium of claim 816, wherein the program instructions are further executable to implement:

assessing a volume of at least a portion of the heart tissue.

884. The carrier medium of claim 816, wherein the program instructions are further executable to implement:

comparing a contrast between two or more sections in at least one image; and

assessing a viability of the heart tissue.

885. The carrier medium of claim 816, wherein the program instructions are further executable to implement:

evaluating motion of at least one portion of at least one feature of one or more images of heart tissue; and

assessing asynergy of the heart tissue.

886. The carrier medium of claim 816, wherein the program instructions are further executable to implement:

evaluating a curvature of at least a section of a portion of a heart comprising the heart tissue; and

assessing a shape of at least the portion of the heart.

887. The carrier medium of claim 816, wherein the program instructions are further executable to implement:

assigning at least one reference point to at least two images of the heart tissue;

evaluating a relative movement of at least one of the reference points between at least two images of the heart tissue; and

assessing a viability of the heart tissue.

888. The carrier medium of claim 816, wherein the program instructions are further executable to implement:

determining at least a first and second volume of a portion of the heart tissue and blood flow through a portion of the heart; and

assessing a mitral regurgitation with a provided velocity of a fluid through at least a portion of the aorta.